cincoze™

EXPERTISE IN
EMBEDDED COMPUTING

- Smart Factory
- Intelligent Machine
- Machine Vision
- Intelligent Transportation
- Railway Computing

- In-Vehicle Computing
- Warehouse & Logistics
- Energy
- Kiosk
- Security & Surveillance

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About Cincoze

Overview

Expertise in Embedded Computing

Cincoze is a rugged embedded computer brand providing diversified embedded computer solutions tailored to market needs. Its product lines include rugged embedded computers, industrial panel PCs, industrial displays, and embedded GPU computers. Cincoze products meet various vertical markets' application needs, especially factory automation, mechanical automation, machine vision, AIoT, robotics, in-vehicle computing, smart transportation, smart warehousing, and logistics. Over the years, Cincoze has launched many innovative products and won several patents, awards and international certifications.

Cincoze offers a refreshing, customer-focused approach to rugged embedded computers and is known for providing superior quality and reliable products. We are committed to implementing the most advanced technologies and look for partners that share our value and vision.

Core Values

Products

We make world-class products designed specifically for industrial use.

Quality

We pay uncompromising attention to quality in everything we do.

Professional

We share useful knowledge, valuable skills, and exceptional service, with an unwavering attitude for our customers' benefits.

Authentic

All our products and services are represented truthfully and without exaggeration, comprising an exceptional combination of materials, details, and functions.
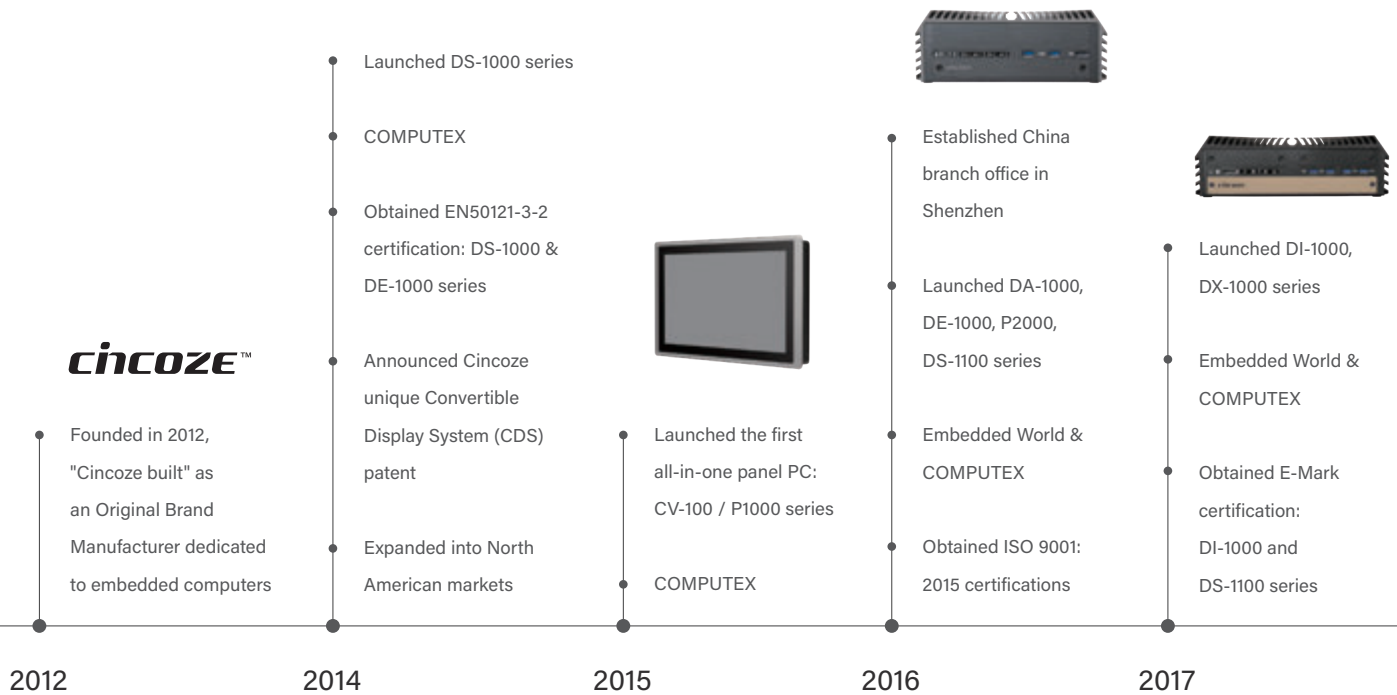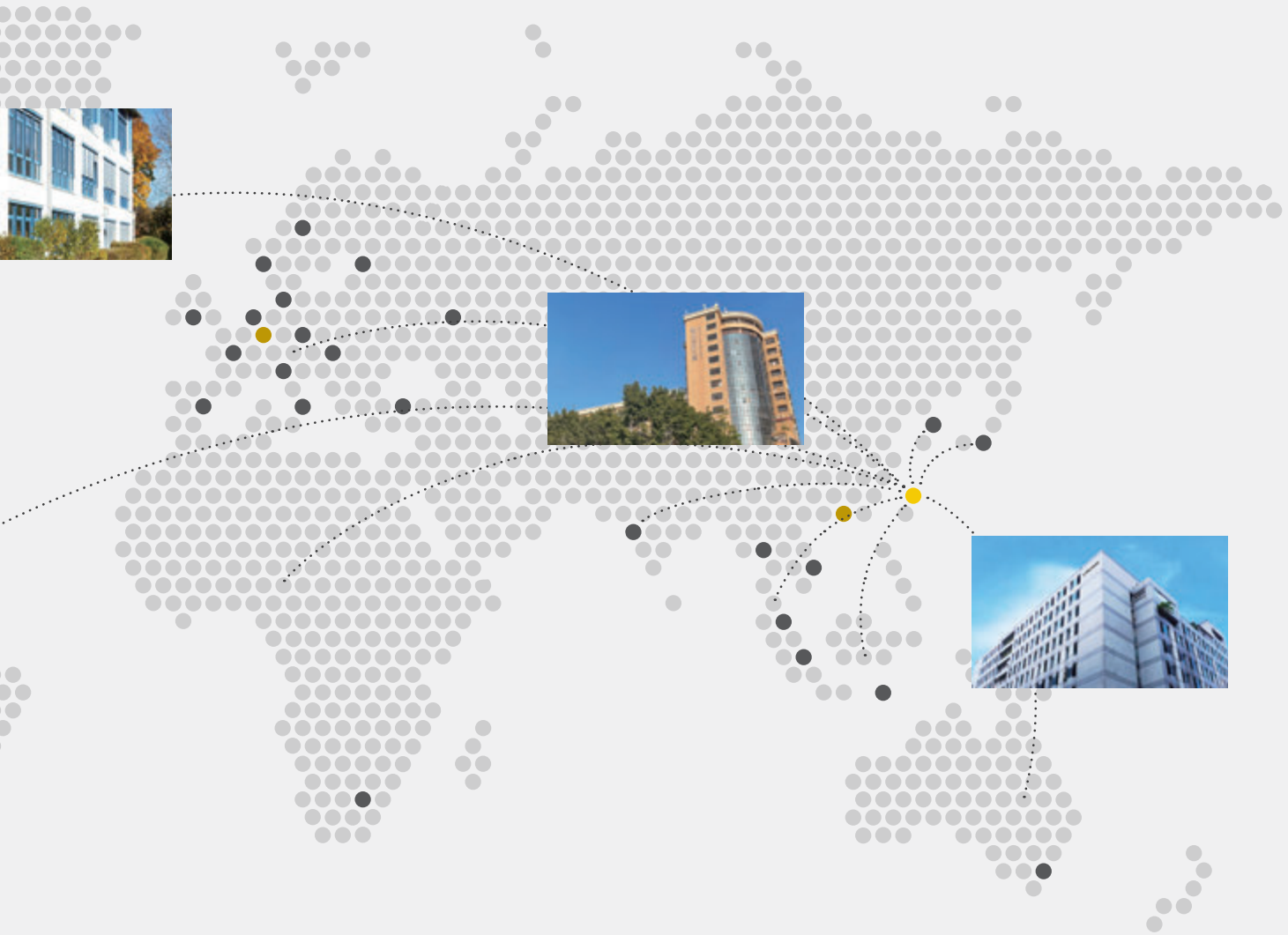
Worldwide Locations

In order to extend our global sales and support, we form partnerships with industry-leading distributors to bring our clients additional value, including up-to-date technology, access to specialized resources and expertized services.

- 🟡 Taiwan Headquarters
- 🟠 Branch Office
- ⚫ 30+ Channel Partners

Milestone

2012

Founded in 2012, "Cincoze built" as an Original Brand Manufacturer dedicated to embedded computers

2014

Launched DS-1000 series

COMPUTEX

Obtained EN50121-3-2 certification: DS-1000 & DE-1000 series

Announced Cincoze unique Convertible Display System (CDS) patent

Expanded into North American markets

2015

Launched the first all-in-one panel PC: CV-100 / P1000 series

COMPUTEX

2016

Established China branch office in Shenzhen

Launched DA-1000, DE-1000, P2000, DS-1100 series

Embedded World & COMPUTEX

Obtained ISO 9001: 2015 certifications

2017

Launched DI-1000, DX-1000 series

Embedded World & COMPUTEX

Obtained E-Mark certification: DI-1000 and DS-1100 series

Launched GP-3000, DS-1300, DI-1100, DV, Open Frame series

Embedded World

"Product of the year 2021" award by Computer & AUTOMATION: GM-1000

"Engineers' Choice Awards" by Control Engineering: GM-1000

Obtained MIL-STD-810G Military Standard: GP-3000, DS-1300 series

Launched P2100, GM-1000 series

Embedded World

"Products of the Year 2020" award by Elektronik: DS-1202 series

Launched CS-100, P1100, DS-1200 series

Embedded World & COMPUTEX

2018 COMPUTEX d&i award: CS-100 / P2000 series

China International Industry Fair (CIIF)

Launched DA-1100, DX-1100 series, and DC-1200 series

Embedded World

2018

2019

2020

2021

Competitive Advantage
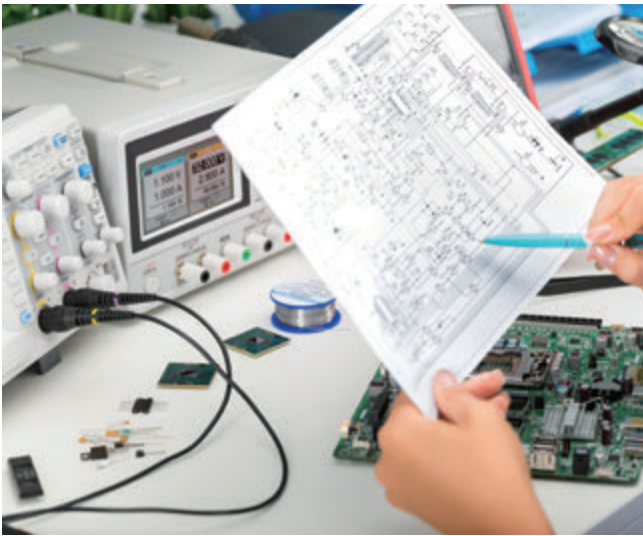
Technological Innovation

At Cincoze, we cultivate continual technological innovation to fulfill our mission of providing more efficient and sustainable solutions to meet the constantly changing requirements of industrial environments. We offer application-driven technological advances to enhance all aspects of customer value and profitability.


Complete Product Portfolio

Cincoze has a comprehensive product portfolio. Current product offerings comprise rugged embedded computers, modular panel PCs, industrial monitors, and embedded GPU computers in different form factors, computing performance and expansion type to fulfill different needs.

Reliable Quality Assurance

To ensure total quality, we 100% test and verify all products through rigorous production planning. Additionally, we are committed to a safe and green environment, and thus our products are made with safe materials and are RoHS compliant.
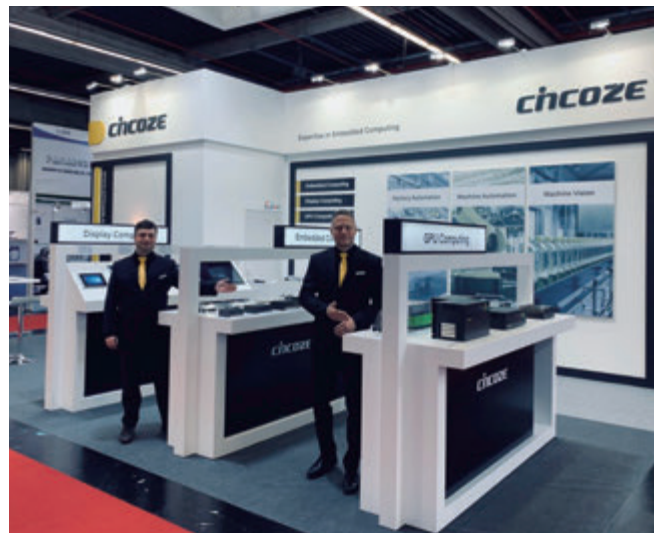
Your Trusted Brand

We strongly believe in leading products and solutions with the aim of controlling, monitoring and optimizing industrial processes and functions. We at Cincoze work non-stop to create a solution to meet application specific demands.

Our Technology

Cincoze designs and produces truly rugged fanless computers. Our core technologies include rugged design, modular computing, convertible display system (CDS), and application-driven functionalities specifically suited for harsh industrial applications.

| Rugged Design | Modular Computing | Convertible Display System | Application-Driven Functionalities |

Our Technology

01 | Rugged Design

In order to produce a truly rugged embedded computer, Cincoze converts the word "rugged" into real product specifications. Not only we are pursuing the highest product viability and endurance standard, but we also take into consideration all sorts of protection against electrical discharge for our computers to sustain in the real industrial environment.
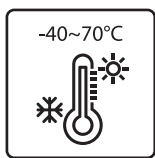
Fanless Design	Wide Temperature Operation	Unibody Chassis	Cable-Less	Jumper-Less	Shock & Vibration Tolerance	Industrial Components
Wide Range DC Inqut	Reverse Power Protection	Over Voltage Protection	Over Current Protection	ESD Protection	Surge Protection	Heat Dissipation
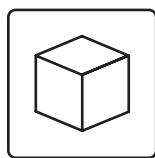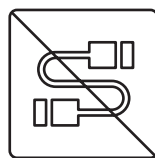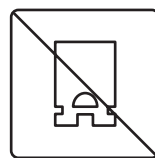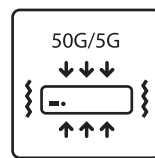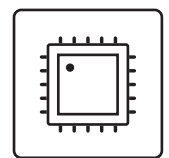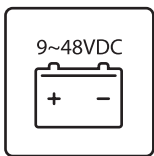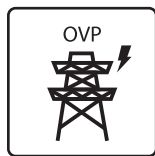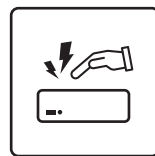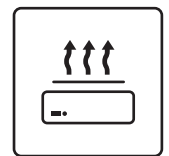
02 | Modular Computing

Cincoze implements our exclusive modular computing design across our product series. Our modular technologies include CMI (Combined Multiple I/O), CFM (Control Function Module), MEC (Mini-PCIe Expansion Card). With these technologies, you can flexibly install additional I/O or functions according to requirements on Cincoze's base units, such as LAN, COM ports, DIO, PoE, M12 connectors, USB, Firewire, Power Ignition Sensing (IGN), and others.
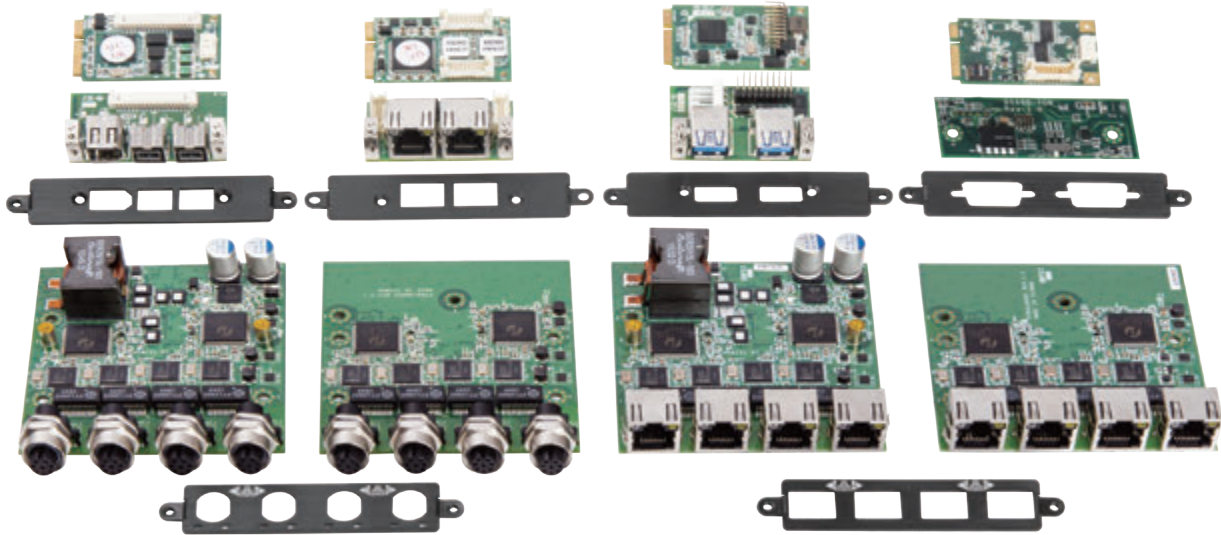
CMI
TECHNOLOGY

Combined Multiple I/O

Exclusive Technology

Support Dedicated Module

Add LAN, PoE, COM, or DIO

CFM
TECHNOLOGY

Control Function Module

Exclusive Technology

Support Dedicated Module

Add Power Ignition Sensing (IGN) or PoE

MEC
TECHNOLOGY

Mini-PCIe Expansion Card

Open Standard Technology

A Full series of Mini-PCIe Cards

Add USB, LAN, COM, or Firewire

03 | Convertible Display System (CDS)

Convertible Display System (CDS), a technology patent owned by Cincoze, is a standardized "all-in-one" system that is composed of two major parts: display and computer. They are interdependent and can be operated together. The advanced electronic design integrates display, touch and computer signals in an embedded circuit board, which provides the most reliable display computing operation.

■ **Configure on Demand**

Panel PCs and touch monitors in a wide range of sizes and specifications can be customized with I/O expansion modules for quick and efficient configuration.

■ **Scalable**

The computer and screen size can be upgraded independently to accommodate future requirements, while still retaining backward compatibility with existing models. Systems can be updated as requirements change.

■ **Transformable**

Display module is compatible with both a computer module and monitor module.

Display module + Computer module = Panel PC

Display module + Monitor module = Monitor

■ **Easy Maintenance**

On-site maintenance is possible because all spare parts can be changed directly on-site, reducing downtime and wait.

Configure on Demand

Display Module

A
B
C
D

Computer Module

A
B
C
D

Scalability

Present   Future

Display Module

▪ Brightness
▪ Resolution
▪ Panel Size

▶ ▶ ▶

Computer Module

▪ Performance
▪ Function
▪ Connectivity

Transformability

Display Module

+ Computer Module

+ Monitor Module

All-in-one Panel PC

Touch Monitor

Easy Maintenance

VS

Stand-alone Display System

Big Effort for Maintenance

Convertible Display System

Onsite Maintenance

04 | Application-Driven Functions

Cincoze product management and engineers listen to the markets. We study market feedbacks and convert demand into product specifications. Our computers are specifically designed to fulfill industrial applications with dedicated I/O ports and functions.

Furthermore, Cincoze's products are certified with many vertical market compliance regulations, such as railway certification and in-vehicle certification.
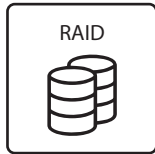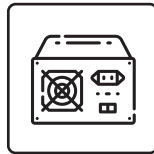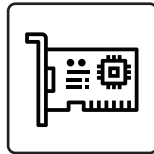
RAID	AT/ATX Switch	PCI/PCIe Expansion	Instant Reboot	Multi LAN
Optical isolated Digital I/O	Power Ignition Sensing	Power Over Ethernet	M12 Connector	Power over Serial
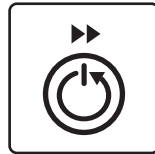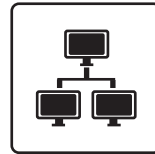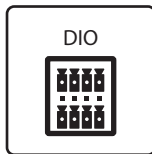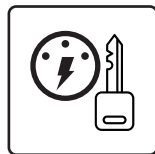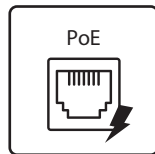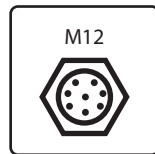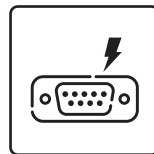
Factory Automation	Machine Automation	Machine Vision
Transportation	Utility & Energy	Security & Surveillance

Company Product Solutions

Cincoze is a professional manufacturer providing industrial computing solutions. We offer three product lines that include rugged embedded computer, modular panel pc & industrial monitor, and embedded GPU computer.

Embedded Computing

Rugged Embedded Fanless Computer (DIAMOND series)	Embedded GPU Computer (GOLD series)	Modular Panel PC & Industrial Monitor (CRYSTAL series)
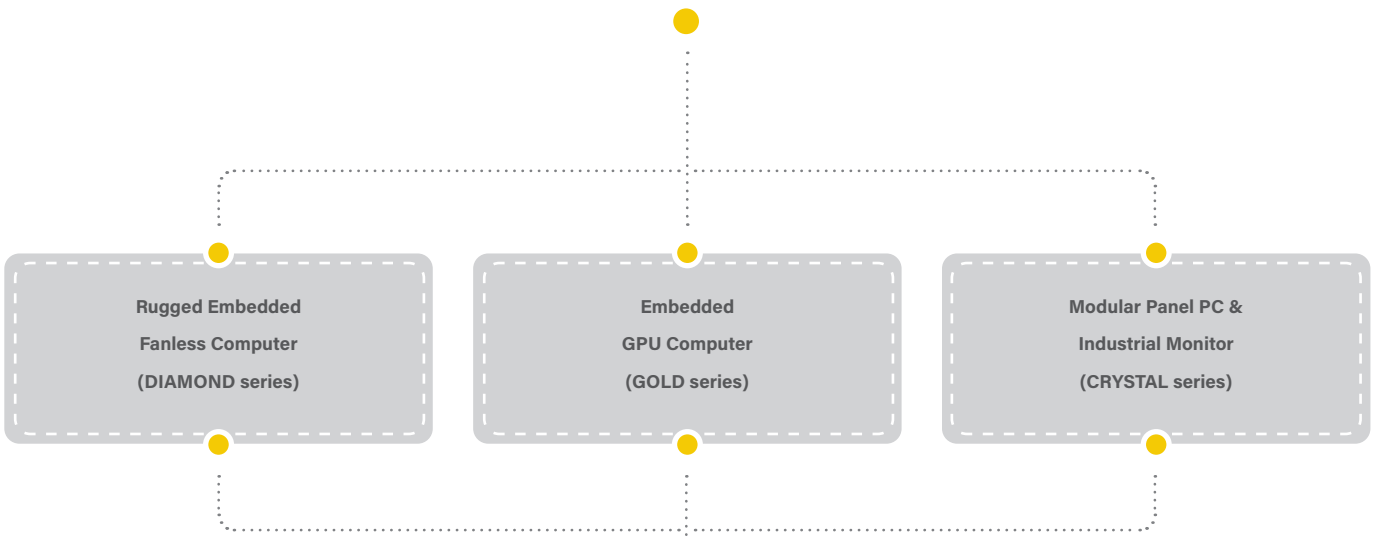
Markets

Smart Factory

Intelligent Machine

Machine Vision

Intelligent Transportation

Railway Computing

In-Vehicle Computing

Warehouse & Logistics

Energy

Kiosk

Security & Surveillance

Product Lineup

Rugged Embedded Fanless Computer
(DIAMOND series)

Extreme Performance & Expandable (DS series)

Extreme Performance & Compact Size (DX series)

High Performance & Compact Size (DI series)

Power Efficient & Expandable (DE series)

Power Efficient & Compact Size (DC series)

Power Efficient & Palm Size (DA series)

Industrial Modular Panel PC
(CV-100+P2000 series / CV-100+P1000 series)

Sunlight Readable Panel PC
(CS-100+P2000 series / CS-100+P1000 series)

Industrial Monitor
(CV-100+M1000 series)

Sunlight Readable Monitor
(CS-100+M1000 series)

Convertible Embedded System
(P2000 series / P1000 series / M1000 series
 CV-100 series / CS-100 series)

Modular Panel PC & Industrial Monitor
(CRYSTAL series)

Embedded GPU Computer
(GOLD series)

Dual Full-length GPU Expandable Computer
(GP-3000 series)

Embedded MXM GPU Computer
(GM-1000 series)

Markets
01 | Smart Factory

Introduction

Smart factories are entirely self-reliant, fully self-contained, utilize automated production processes, and support inter-machine communication. Smart factories include production automation and smart manufacturing. More importantly, they integrate automated equipment and production lines that transmit production data to the central control room through a high-speed network and integrate with the MES to inform company strategy and decision-making. Industrial computers play a crucial role in smart factories. In addition to processing and collecting visual data, they play a vital role in optimizing production capacity and improving market competitiveness through core computing and data analysis.

Application

- SCADA
- IIoT
- Data acquisition
- Measurement
- HMI
- M2M

Suggested Products

DIAMOND series
DS series (page 59)
DE series (page 47)

CRYSTAL series
CV-100/P2000 (page 67)
CV-100/P1000 (page 99)
CV-100/M1000 (page 141)
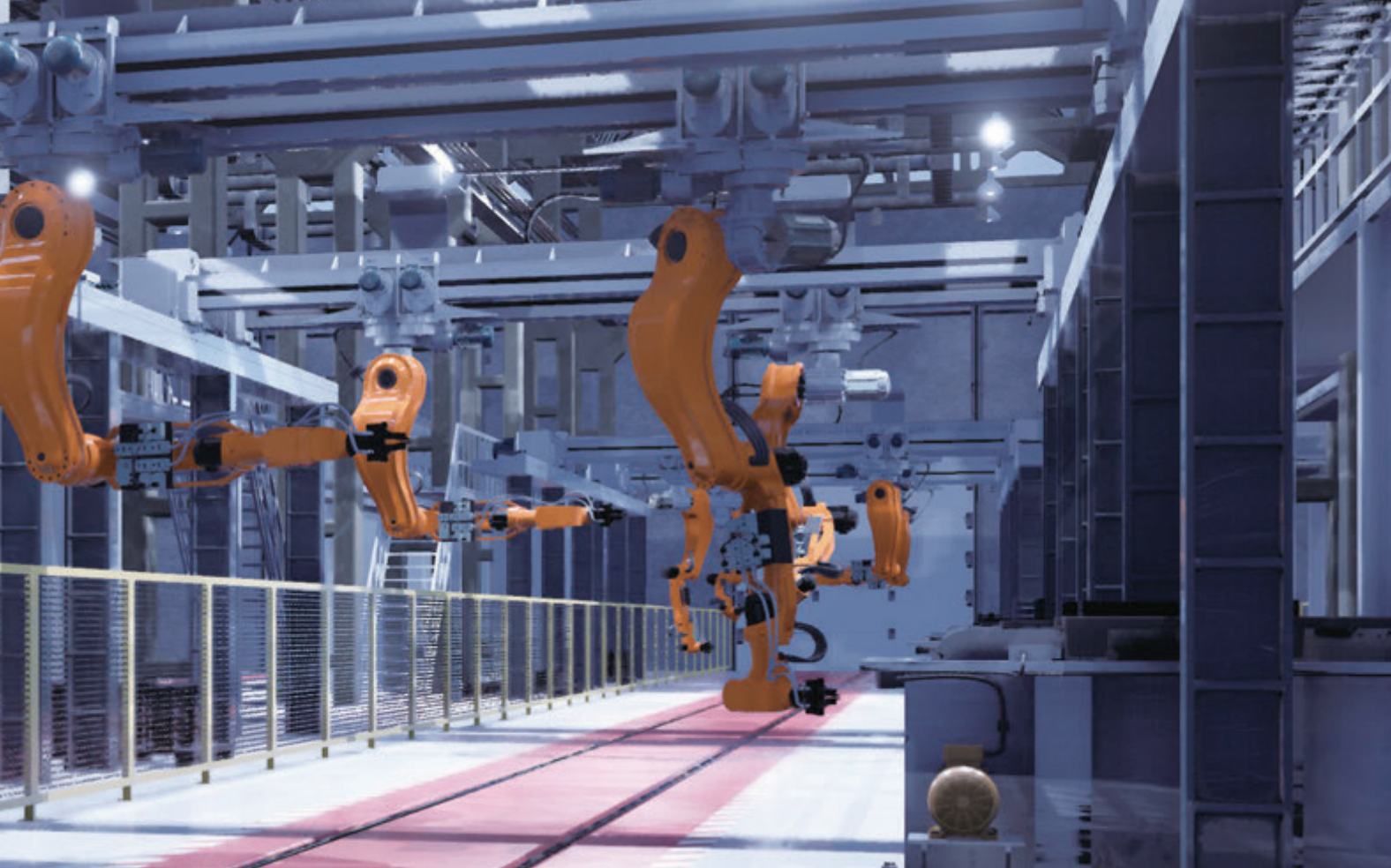
Customer Requirements & Why Cincoze?

■ **Stability and reliability, the cornerstones to 24/7 operation**

Wide temperature range, shock resistance, and impact resistance are core features. Multiple safety mechanisms, including electrostatic discharge, overcurrent, and overvoltage protection, prevent the most common causes of equipment failure in unsafe environments. The fanless design protects the sensitive internal parts from the dust and dirt of the factory environment.

■ **Expansion support for data acquisition and motion detection cards**

Various expansion cards are supported, including PCI, PCIe, and Mini-PCIe expansion cards, to suit different factory applications.

■ **Multiple connections interface with factory equipment**

Standard connections, including Power over Serial, high-speed USB, GbE LAN, PoE, and digital I/O cover most smart factory use-case scenarios.

■ **Wireless communication module for data transfer**

The internal Mini-PCIe expansion slot and SIM card slot support commercially available wireless communication modules for WiFi, 3G, 4G/LTE, and 5G connectivity—enabling real-time data delivery to the central control room and the cloud.

■ **Easy setup and convenient maintenance**

Essentials are accessible via the front panel, including AT/ATX mode switch, CMOS battery, and removable hard disk—making the initial setup, regular maintenance, and further adjustment super convenient.

Markets

02 | Intelligent Machine

Introduction

Intelligent machines refer to mechanical equipment that integrates self-management technologies like failure prediction, accuracy measurement, automatic parameter setting, and automated scheduling. Industrial embedded computers for these applications are responsible for data collection, processing, and sensor input analysis to enable effective control and decisions and allow the enterprise to increase effectiveness and improve efficiency. From mass manufacturing to small customized production, and from manual to automatic decision-making, they are an indispensable and important link in machine intelligence.

Application

- HMI
- M2M
- Predictive maintenance
- Remote control
- Industrial connectivity

Suggested Products

DIAMOND series	
DA series (page 39)	DI series (page 51)
DC series (page 43)	DX series (page 55)

CRYSTAL series
CV-100/P2000 (page 67)
CV-100/P1000 (page 99)
CV-100/M1000 (page 141)

Customer Requirements & Why Cincoze?

■ Compact size for installation in tight spaces

Lightweight and small size is suitable for machinery, equipment, arms, and other limited space installation. The unique cooling design wicks heat away through copper heat pipes in the extruded aluminum shell, eliminating fans from the cooling equation—ideal for installation in small, hot spaces.

■ Built tough for harsh environments

The DIAMOND series has wide temperature support, shock resistance, and impact resistance. It also includes an integrated cover and features cableless and jumperless design. All these, combined with an anti-vibration kit, reduce the typical risks caused by vibration.

■ Convenient maintenance for reducing maintenance cost and time

The storage area, AT/ATX switch, and CMOS battery are easily accessible through the front panel. The CRYSTAL line's patented CDS technology allows super-specific replacement of parts for maintenance when troubleshooting, reducing downtime and maintenance costs.

■ Multiple connectors for easy connection to factory equipment

Available ports include Power over Serial, high-speed USB, GbE LAN, PoE, and digital I/O to connect to factory equipment with various individual requirements.

■ Upgrade flexibility to meet future needs

The CRYSTAL line's patented CDS technology splits the computer and screen into separate parts for individual replacement or upgrades. In addition to having excellent upgrade flexibility, this also reduces upgrade costs.

Markets

03 | Machine Vision

Introduction

Machine vision refers to capturing images through lenses and sensors, then sending them to an industrial computer for processing and analysis. Use-cases range from simple environmental perception applications such as positioning, inspection, measurement, identification, and sorting of production lines at the factory, to smarter vision-guided automation applications. The AI-powered machine vision widely used in automatic inspection system and robots is also suitable for security monitoring and vehicle navigation applications.

Application

- Vision guided robotics
- Automated optical inspection
- Object detection
- Optical character recognition and verification
- Automated vision testing and measurement

Suggested Products

GOLD series	
GP-3000 series (page 175)	GM-1000 series (page 171)

Customer Requirements & Why Cincoze?

■ **High-performance computing and image processing**

In addition to the latest Intel® workstation-class CPU, the GOLD series offers various GPU computing options. MXM modules offer compact GPU performance for embedded computers, while high-end GPU cards are better suited for high power budget computers. Combined, the CPU and GPU enable powerful AI and image processing capabilities.

■ **High-speed I/O, for cameras, sensors, and data transmission**

Native high-speed I/O includes USB 3.2 Gen 2 (10 Gb/s) and GbE LAN are standard. Additionally, Cincoze CMI and CFM technology allows I/O expansion, including options for GbE LAN, 10 GbE LAN, and PoE, amongst others, facilitating the rollout of multiple high-speed cameras and sensors.

■ **Built tough, for safe operation in harsh conditions**

Primary features include -40–70℃ temperature and 9–48 VDC support. There's also overvoltage, overcurrent, and electrostatic discharge protection. The sturdy and durable heat dissipation design completes this rugged package, effectively removing excess heat and ensuring that the CPU and GPU can operate at maximum efficiency.

■ **Expandability, for high-speed I/O, image capture, and other expansion cards**

The whole product line includes multiple PCIe, Mini-PCIe, or other expansion slots for system customization tailored to application requirements.

■ **Massive high-speed storage, for large-scale video and image needs**

Multiple storage options are available, including a high-speed M.2 NVMe storage slot with various SSD, HDD, and SATA options.

Markets

04 | Intelligent Transportation

Introduction

Intelligent transportation uses advanced technology to combine systems with sensors, computing, control, GPS, and real-time wireless transmission to improve the traffic system's safety, efficiency, and service and enhance user experience. The traffic management center in intelligent transportation collects and analyzes data with precise location information for real-time traffic monitoring and management and broadcasts traffic information to commuters to improve their travel safety and comfort.

Application

- Passenger information display system
- Public transport surveillance system
- Automated fare collection
- Traffic monitoring system
- Wayside control system
- Object screening

Suggested Products

DIAMOND series	CRYSTAL series	GOLD series
DX series (page 55)	CV-100/P2000 (page 67) CV-100/P1000 (page 99)	GP-3000 series (page 175)

Customer Requirements & Why Cincoze?

■ Strong and durable, for indoor and outdoor use

The DIAMOND series of fanless embedded computers support a -40~70 ℃ temperature range and are vibration and shock resistant (5/50 Grms). The CRYSTAL industrial panel PC has a tough die-cast aluminum alloy frame and 7H touchscreen for superb scratch resistance. It is also rated IP65 and dustproof, and high-brightness for clear visibility indoors and outdoors.

■ High performance, for copious image data capture and processing

The GOLD product line features the latest Intel® workstation-grade CPUs and supports commercial high-end GPU cards selectable according to application demands. The system provides ultra-high power to meet the needs of various high-performance applications, including real-time processing of large high-definition images.

■ High-speed I/O and display ports, for monitoring and playback

Standard configuration provides multiple sets of high-speed I/O like USB 3.2 Gen2 (10 Gb/s) and GbE LAN. Customization with CMI and CFM expansion modules adds GbE LAN, 10GbE LAN, or PoE to connect to many high-speed cameras. For playback, various display interfaces, including HDMI, DVI, and DisplayPort, are provided.

■ Expansion support, for real-time data transmission

The built-in MiniPCIe expansion slot and SIM card slot support commercially available wireless communication modules, enabling real-time image data transmission to the central control room or the cloud.

■ Easy-access hard disk, for quick emergency access

Hard disks are placed in the front part of the device for easy access through the front panel. Besides improving the convenience of maintenance, it is much quicker to access saved data in an emergency by opening the front panel and taking out the hard drive directly.

Markets
05 | Railway Computing

Introduction

Rail transit encompasses all modes of rail transportation, including commuter rail, rapid transit, subways, and light rail. As transportation volume increases, software and hardware upgrades and replacement are needed to keep pace with increased security monitoring needs and increased demand for passenger services. Operators must adopt advanced technology applications to improve system safety, stability, and decision-making efficiency. Developing smarter railways is every nation's railway operator and supervisory agency's ideal goal.

Application

- Wayside signaling system
- Passenger infotainment system
- CCTV-in-train surveillance system

Suggested Products

DIAMOND series	GOLD series
DS series (page 59)	
DE series (page 47) DX series (page 55)	GP-3000 series (page 175) GM-1000 series (page 171)

Customer Requirements & Why Cincoze?

■ Meets international certification and complies with relevant laws and regulations

Cincoze has EN50121-3-2 international certification, meeting the requirements for transportation and environmental protection in European rail regulations, making it an excellent choice for railway transportation.

■ Strong and durable, can adapt to size-restricted and demanding use environments

With operating temperature tolerance of -40–70 ℃ , anti-vibration structure, and fanless design, the special cooling technology allows heat to be quickly transferred through the copper heat pipes and dissipated through the extruded aluminum shell, making it suitable for installation in hot and compact spaces.

■ Extensible, real-time connection, with GPS for live train positioning and reporting

The built-in Mini-PCIe expansion slot and SIM card slot accept commercially available wireless communication modules with WiFi, 3G, 4G, LTE, 5G, and GPS capabilities. Some models support multiple antenna options.

■ Multiple high-speed I/O and display ports for safety monitoring in the cabin or passenger information systems

Multiple sets of high-speed I/O such as USB 3.2 Gen2 (10 Gb/s) and GbE LAN are built-in. CMI and CFM modules allow the addition of GbE, 10GbE LAN, and PoE for connecting multiple high-speed cameras. Multiple displays are supported through HDMI, DVI, and DisplayPort connections.

Markets

06 | In-Vehicle Computing

Introduction

Industrial computers are the management center for in-vehicle information connection and monitoring, enabling information transmission, fault analysis, and safety monitoring. These computer's typical use is in commercial fleets and public transportation for fleet management, dynamic tracking, vehicle maintenance, and detection. The remote control center can immediately access vehicle information and personnel data through the vehicle's industrial computer to improve resource allocation and safety supervision.

Application

- Autonomous driving
- In-vehicle passenger information display system
- In-vehicle media and entertainment system
- Fleet management

Suggested Products

DIAMOND series		GOLD series	
DC series (page 43)	DX series (page 55)	GP-3000 series (page 175)	GM-1000 series (page 171)
DS series (page 59)	DI series (page 51)		

Customer Requirements & Why Cincoze?

■ **International certification, for regulatory requirements**

Equipped with an E-Mark certificate and meeting regulatory requirements for driving safety and environmental protection, it's an excellent choice for a vehicle, and fleet management.

■ **Strong and durable, for tough and tight spaces**

The supported temperature range is -40–70℃ , and the shock resistance rating is 5/50 Grms. A copper heat pipe runs through the extruded aluminum shell that allows heat to pass out quickly, enabling fanless design and making it suitable for installation in small, hot spaces.

■ **Programmable shutdown time, to avoid system damage and data corruption**

Cincoze's unique power ignition sensing (IGN) module has three primary features for vehicle applications. It can detect battery voltage to prevent unwanted battery drain, turn on only when the voltage is stable, and delay shutdown to eliminate damage due to sudden power loss.

■ **Expansion support for real-time connectivity, location, and fleet management**

Built-in Mini-PCIe expansion slot and SIM card slot support commercially available wireless communication modules including WiFi, 3G, 4G/LTE, 5G, and GPS. Some models support multiple antenna options.

■ **Multiple interfaces, for driver monitoring or safety monitoring system**

In addition to the native I/O interfaces like Power over Serial, high-speed USB, GbE LAN, PoE, and digital I/O, Cincoze's exclusive CMI and CFM technology expands various interfaces including Power over Serial, digital I/O, LAN, PoE, M12, and more.

Markets

07 | Warehouse & Logistics

Introduction

Intelligent warehouse and logistics is an important development in recent years. The so-called smart warehouse refers to various sensors, RFID radio frequency identification, network communication, GPS, and other methods combined with automated logistics equipment to realize the automatic capture, identification, early warning, and management of incoming and outgoing data. These smart systems reduce storage costs, optimize efficiency, and enhance management capabilities. Embedded computers are the brain of smart equipment, providing computation, control, and decision-making in smart storage solutions. They play a role in receipt and dispatch information management and identification, automated transportation, automated guided vehicle (AGV), pallet trucks, forklifts, and even logistics robots, such as picking and packing tasks.

Application

- Automatic conveyor system
- Automatic goods scanning
- Automatic guided vehicle control
- Real-time order tracking in forklift
- Forklift scales

Suggested Products

DIAMOND series

DA series (page 39)

DI series (page 51)

DC series (page 43)

CRYSTAL series

CS-100/P2000 (page 125)

CS-100/P1000 (page 133)

Customer Requirements & Why Cincoze?

▮ Tough and durable, for harsh and tight installs

With a small size, fanless design, wide temperature tolerance, and vibration/shock resistance (5/50 Grms), the embedded computer supports installation in an AGV, AMR, pallet truck, and various other logistics equipment.

▮ Low power consumption, for extended operation

Low-power embedded computers reduce the time spent charging logistics and transportation equipment and improve handling efficiency by keeping them in operation longer between charges.

▮ Scalable and expandable, for real-time transmission of data and location

Built-in Mini-PCIe expansion slot and SIM card slot support commercially available wireless communication modules for WiFi, 3G, 4G/LTE, 5G, and GPS, delivering location information and data in real-time.

▮ Multiple I/O, for connection, identification, and data processing

In addition to native Power over Serial, high-speed USB, GbE LAN, PoE, and other interfaces, you can also use Cincoze's exclusive CMI and CFM technology to add interfaces such as Power over Serial, digital I/O, LAN, PoE, and M12.

▮ Safe and reliable, for stability and reliability

Computers provide wide temperature tolerance, vibration and shock resistance, and provide multiple safety protection mechanisms, such as electrostatic discharge, overcurrent, and overvoltage protection. Together, these virtually eliminate the impact on equipment caused by unsafe environments.

Markets
08 | Energy

Introduction

Smart energy management systems are driving future energy security control development. Whether wind, nuclear, or solar power, production data must be collected and uploaded to the cloud for further analysis and used for machine learning to inform efficient capacity adjustments and forecast maintenance. Solutions such as equipment monitoring and environmental monitoring are just some of the many aspects of smart energy management systems.

Application

- SCADA
- Data acquisition
- Power management
- Central monitor
- Environmental monitoring

Suggested Products

DIAMOND series	GOLD series
DS series (page 59)	GP-3000 series (page 175)
DE series (page 47)	

Customer Requirements & Why Cincoze?

High stability and reliability for 24/7 operation

Operates in a wide temperature range, features anti-vibration and impact resistance. Multiple safety protection mechanisms, such as electrostatic discharge, overcurrent, and overvoltage protection. Effectively protecting equipment from the impact of harsh environments.

Expandability to support functions like data acquisition cards

Multiple expansion slots, including PCI, PCIe, and Mini-PCIe, satisfy a power plant's various data collection and application expansion requirements.

Supports wireless communication module for data transfer

The built-in Mini-PCIe expansion slot and SIM card slot can be used with commercially available wireless communication modules with WiFi, 3G, 4G, LTE, and 5G capabilities to transfer data to the cloud or the central control room in real-time.

Convenient maintenance for easy setup and repairs

For the most convenient setup, maintenance, and adjustment, the AT/ATX switch, CMOS battery, and removable hard drive are accessible through the front maintenance panel.

Markets
09 | Kiosk

Introduction

Modern kiosks use computers for a better self-service experience. Thanks to recent developments in IoT, kiosk applications are divided into two primary categories. First, public information kiosks allow you to get information, typically related to the installation location, like a mall or airport, and provide directions and answers to frequently asked questions. The other is application-specific kiosks, such as ticket vending, passbook updating, and drive-thru machines. All kiosks reduce labor costs, offer various useful services, and through real-time interactive screens, provide 24-7-365 service. Outdoor kiosks are different from general indoor kiosk, which needs to be stronger and more durable in a harsh environment. Outdoor kiosks have become the first choice for retail and other verticals like transportation, education, tourism, and a host of other applications.

Application

- Virtual queuing system
- Vending machine
- Drive-thru ordering system
- Automated fare collection

Suggested Products

CRYSTAL series
CS-100/P2000 (page 125)
CS-100/P1000 (page 133)

Customer Requirements & Why Cincoze?

■ Built tough, to withstand the outdoors

Wide temperature tolerance of -20~70 ℃ is the first feature. The CRYSTAL product line uses a tough die-cast aluminum alloy and has a 7H scratch-resistant touch surface. The front panel is rated IP65, ensuring that it's waterproof and dustproof, shielding sensitive electronics from the elements.

■ Super-bright backlight, for clear daylight visibility

The backlight has a 1,600 nits rating, providing ample screen brightness for reading, even when the sun is shining bright.

■ Multiple I/O ports, for wired and wireless connectivity

Native I/O ports include USB 3.2, LAN, Power over Serial and more. The internal expansion consists of a Mini-PCIe slot and SIM card slot supporting wireless communication modules for WiFi, 3G, 4G/LTE, and 5G wireless network connectivity requirements.

■ Various styles, for different environments

Screen sizes range from 8 to 24-inch and all have multi-point projected capacitive (P-CAP) touchscreens. Various mounting methods are supported, including flat mount and panel mount, for comprehensive coverage of every application scenario.

■ Convenient maintenance, reducing down-time cost

The patented CDS technology allows separate upgrade and replacement of the computer module and display module. This approach reduces downtime and maintenance costs as only the faulty part needs replacement, not the whole machine. This upgrade flexibility means that whether there is a screen size upgrade or a computer specification upgrade, the only thing to replace is the display module or computer module, keeping upgrade costs in check.

Markets

10 | Security & Surveillance

Introduction

Security and surveillance takes the video input from surveillance cameras, returns that data to the computer host for real-time image processing and recognition, and displays it on a monitor. A wide range of locations, including stores and museums, use these technologies for surveillance systems, body temperature and thermal sensing, facial recognition, and access control. With the advancement of the internet and image processing technologies, security monitoring is becoming smarter and more advanced. These computers can now do people counting, intrusion detection, customer analysis, boundary protection, traffic analysis, congestion warning, facial recognition, area analysis, and loiter detection. These intelligent monitoring applications are the future of security control, and embedded computers play a key computational role in this scheme.

Application

- CCTV surveillance system
- Central monitoring system
- Object detection
- Real-time pose estimation
- Video analytics

Suggested Products

DIAMOND series

DX series (page 55)

DS series (page 59)

DI series (page 51)

GOLD series

GP-3000 series (page 175)

GM-1000 series (page 171)

Customer Requirements & Why Cincoze?

High-performance computing, for fast high-definition image processing

In addition to supporting the latest Intel® high-performance CPUs, you can choose to install one or more commercially available GPU cards according to processing requirements. No matter how large or high-definition the images, real-time processing is possible, and the computer provides ultra-high power to meet the needs of various high-efficiency applications.

Multiple PoE, for connection to high-speed IP cameras

Multiple IEEE802.3at PoE+ ports provide up to 25.5 W of power per port. This power supply meets all high-speed IP cameras' power requirements and drives everything stably from the connected device terminal.

Large storage & RAID, for security and numerous images

Device storage is configurable for large-capacity or high-speed storage such as SSD, HDD, mSATA, and NVMe according to computer requirements. RAID array storage operations include RAID 0/1/5/10, providing safe, secure storage for large-capacity layouts.

Quick-access hard disk, for easy emergency access

The hard disk placement inside the computer's main front panel makes access easy. In addition to improving the convenience of maintenance, it is convenient to retrieve monitoring data in an emergency. It is easy to open the front panel to get to the hard drive pronto.

Product & Market Selection Guide

Rugged Embedded Fanless Computer (DIAMOND series) &
Embedded GPU Computer (GOLD series)

	Smart Factory	Intelligent Machine	Machine Vision	Intelligent Transportation	Railway Computing	In-Vehicle Computing	Warehouse & Logistics	Energy	Security & Surveillance
Rugged Embedded Fanless Computer									
DS series	✓	✓	✓	✓	✓	✓		✓	✓
DX series	✓	✓	✓	✓	✓	✓			✓
DI series	✓	✓		✓	✓	✓	✓		
DE series	✓	✓		✓	✓	✓		✓	
DC series	✓	✓		✓		✓	✓		
DA series	✓	✓		✓			✓		
Embedded GPU Computer									
GP series	✓		✓	✓	✓	✓		✓	
GM series	✓	✓	✓	✓	✓	✓		✓	✓

Modular Panel PC & Industrial Monitor (CRYSTAL series)

	Smart Factory	Intelligent Machine	In-Vehicle Computing	Warehouse & Logistics	Kiosk
Industrial Modular Panel PC					
CV-100/P2000 series	✓	✓	✓		
CV-100/P1000 series	✓	✓	✓		
Sunlight Readable Panel PC					
CS-100/P2000 series				✓	✓
CS-100/P1000 series				✓	✓
Industrial Monitor					
CV-100/M1000 series	✓	✓	✓		
CS-100/M1000 series				✓	✓

DIAMOND Product Line
Rugged Embedded Fanless Computer

Rugged

Cincoze converts the word "Rugged" into real product specifications, such as fanless, cable-less, wide operating temperature, and high tolerance for shock and vibration. Beyond that, high-quality industrial-grade components guarantee a steady system operation even in harsh environments.

Reliable

As a professional manufacturer of embedded computers, Cincoze's major goal is to develop safe, sustainable, and reliable solutions. Our full range of products has passed rigorous certifications and integrated all sorts of industrial-grade protections to fulfill the evolving industrial market requirements.

Modular

Cincoze's unique CMI (Combined Multiple I/O), CFM (Control Function Module) and MEC (mPCIe Card) technologies allow flexible expansion and additional functions according to specific requirements. The options of add-on modules include M12, PoE, multi-LAN, power ignition sensing (IGN) and a variety of I/O interfaces.

Application-driven

Our products are specifically integrated with many application-ready functions, including digital I/O, power ignition sensing (IGN), Power over Ethernet, power over serial, RAID, and multi-LAN. By using those ready-to-use functions, it can speed up your application deployment and minimize project development cost.

Cincoze is proud to offer our fanless embedded computers which are designed to be rugged, fanless and cableless and are subjected to rigorous testing for verification of their suitability to operate under harsh environmental conditions. They are extremely reliable and suitable for a wide range of industrial applications.

"DIAMOND" is our rugged embedded computer product line that includes seven series ; Extreme Performance & Expandable (DS series), Extreme Performance & Compact Size (DX series), High Performance & Compact Size (DI series), Power Efficient & Expandable (DE series), Power Efficient & Compact Size (DC series) and Power Efficient & Palm Size (DA series).

DIAMOND is a rugged, reliable and comprehensive solution for critical industrial environments.

DA series
Power Efficient & Palm Size

DC series
Power Efficient & Compact Size

DE series
Power Efficient & Expandable

DI series
High Performance & Compact Size

DX series
Extreme Performance & Compact Size

DS series
Extreme Performance & Expandable

DA series
Power Efficient & Palm Size

- Onboard Intel® Pentium® / Celeron® / Atom® SoC
- Palm Size and Cable-Less Design
- 2x Mini-PCIe slots for WLAN / WWAN / I/O expansion
- CMI Interface for I/O Module Expandability
- VESA, DIN-Rail, Side/Wall Mounting
- Wide Operating Temperature (-40°C to 70°C)

DA series is an ultra-compact size fanless embedded computer powered by Intel® Atom®/Celeron®/Pentium® Processor. This can bring economic advantages on budget and also fulfill the needs for industrial computing tasks. DA series supports Combined Multiple I/O (CMI) interfaces and modules which are specially designed for flexible I/O expandability; it allows easy various I/O extension according to specific needs.

Fits in the
smallest of spaces

Smaller and lighter than an Oxford English Dictionary (only 150 x 105 x 52.3 mm). Ideal for tight spaces. Mounting methods include wall mount, DIN-RAIL, VESA, and side mount.

Leading quality
with reasonable price

Infused with industry-grade quality but priced on par with competitors on the market.

Modular design
for effortless customization

Supports Cincoze's modular CMI/CFM for optional expansion in our embedded range, mix-and-match I/O ports as you like.

Specifications

Model Name	DA-1000		
Model No.	DA-1000	DA-1000-E45	DA-1000-J19
System Processor	Intel® Atom® Processor E3826	Intel® Atom® Processor E3845	Intel® Celeron® Processor J1900
Chipset	SOC		
Memory	1x DDR3L, Up to 8GB		
I/O Interface Video Output	1x DVI-I Optional: 1x DVI-D, 1x VGA, 1x HDMI, or 1x DisplayPort		
LAN	2x GbE LAN		
PoE+	-		
Serial Port	2x RS232/422/485 Optional: 2 x RS232/422/485		
USB	1x USB 3.2 Gen1 3 x USB 2.0		
Optical Isolated DIO	Optional: 8x DIO (4x DI, 4x DO)		
Audio	1x Line-Out 1x Mic-in		
Remote Power On_Off / Reset	1 / -		
External FAN Connector	-		
Other	Optional: 1x PS/2 and 1x LPT		
Storage 2.5" SSD / HDD Bay	1		
mSATA	1		
CFast	-		
Expansion CFM / CMI Interface	- / 1		
PCI / PCIe	-		
Mini PCI Express	2		
M.2 Socket	-		
Universal I/O Bracket	1		
SIM Socket	1		
Antenna Holes	2		
Other	-		
Power Requirement Power Input Voltage	AT/ATX, 9-48 VDC		
Physical Dimension (WxDxH)	150 x 105 x 52.3 mm		
Mounting	Wall / Side / DIN Rail / VESA		
Operating System Windows	Windows10, Windows8.1, Windows7		
Environment Operating Temp.	-25℃ to 70℃		
Shock	50 Grms, According to IEC60068-2-27		
Vibration	5 Grms, According to IEC60068-2-64		
EMC	CE, FCC Class A		
Safety	EN62368-1		

Specifications

Model Name	DA-1100	
Model No.	DA-1100-N42	DA-1100-N33
System		
Processor	Intel® Pentium® Processor N4200	Intel® Celeron® Processor N3350
Chipset	SOC	
Memory	1x DDR3L, Up to 8GB	
I/O Interface		
Video Output	1x DVI-I Optional: 1x DVI-D, 1x VGA, 1x HDMI or 1x DisplayPort	
LAN	2x GbE LAN	
PoE+	Optional: 2x PoE+	
Serial Port	2x RS232/422/485 Optional: 2x RS232/422/485	
USB	4x USB 3.2 Gen1 1 x USB 2.0	
Optical Isolated DIO	Optional: 8x DIO (4x DI, 4x DO)	
Audio	1x Line-Out 1x Mic-in	
Remote Power On_Off / Reset	1 / -	
External FAN Connector	-	
Other	Optional: 1x PS/2 and 1x LPT	
Storage		
2.5" SSD / HDD Bay	1	
mSATA	1	
CFast	-	
Expansion		
CFM / CMI Interface	1 / 1	
PCI / PCIe	-	
Mini PCI Express	2	
M.2 Socket	-	
Universal I/O Bracket	1	
SIM Socket	1	
Antenna Holes	2	
Other	-	
Power Requirement		
Power Input Voltage	AT/ATX, 9-48 VDC	
Physical		
Dimension (WxDxH)	150 x 105 x 52.3 mm	
Mounting	Wall / Side / DIN Rail / VESA	
Operating System		
Windows	Windows 10	
Environment		
Operating Temp.	-40°C to 70°C	
Shock	50 Grms, According to IEC60068-2-27	
Vibration	5 Grms, According to IEC60068-2-64	
EMC	CE, FCC Class A	
Safety	EN62368-1	

DC series
Power Efficient & Compact Size

- Onboard Intel® Pentium® / Atom® SoC
- Ultra Compact Size and Cable-Less Design
- 2x Mini-PCIe slots for WLAN / WWAN / I/O expansion
- Power over Serial and Digital I/O Functionalities
- Wide Operating Temperature (-40°C to 70°C)
- E-Mark Certified

Cincoze DC series is a power efficient & compact size computer designed with onboard low-power Intel® Quad-Core processor, rich I/O, a unique expansion capability, and supports wide range (9-48 VDC) power input. DC series is very small and efficient with low power consumption so that is ideal for embedded applications where space is limited.

Compact size
with two Mini-PCIe

Even with a small size (185 x 131 x 54 mm), two Mini-PCIe slots provide the flexibility for multiple applications, including networking and I/O expansion.

54mm

185mm

131mm

Built-in I/O
and expandable modules

The DC series includes LAN, COM, and DIO as standard. CMI, CFM, and MEC modules provide I/O expansion capability and system flexibility.

Specialized
application-specific features

Various extra features are available for specialized applications. Power Ignition Sensing (IGN) to delay system shutdown and avoid damage from voltage overflow. Power-over-Ethernet to directly power PoE cameras without needing an additional external power supply. Instant reboot starts the system in only 0.2 seconds.

PoE
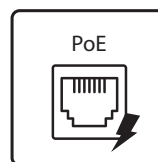
Power Over Ethernet
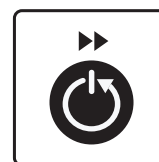
Instant Reboot
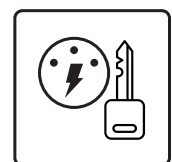
Power Ignition Sensing

Specifications

Model Name		DC-1100
Model No.		DC-1100
System	Processor	Intel® Atom® Processor E3845
	Chipset	SOC
	Memory	1x DDR3L, Up to 8GB
I/O Interface	Video Output	1x DVI-I 1x DisplayPort
	LAN	2x GbE LAN
	PoE+	-
	Serial Port	4x RS-232/422/485
	USB	1x USB 3.2 Gen1 3x USB 2.0
	Optical Isolated DIO	8x DIO (4x DI, 4x DO)
	Audio	1x Line-Out 1x Mic-in
	Remote Power On_Off / Reset	-
	External FAN Connector	-
	Other	-
Storage	2.5" SSD / HDD Bay	1
	mSATA	-
	CFast	1
Expansion	CFM / CMI Interface	- / -
	PCI / PCIe	-
	Mini PCI Express	2
	M.2 Socket	-
	Universal I/O Bracket	1
	SIM Socket	1
	Antenna Holes	2
	Other	-
Power Requirement	Power Input Voltage	AT/ATX, 9-48 VDC
Physical	Dimension (WxDxH)	185 x 131 x 56.5 mm
	Mounting	Wall / Side / DIN Rail / VESA
Operating System	Windows	Windows 10, Windows 8.1, Windows 7
Environment	Operating Temp.	-25℃ to 70℃
	Shock	50 Grms, According to IEC60068-2-27
	Vibration	5 Grms, According to IEC60068-2-64
	EMC	CE, FCC Class A, E-Mark
	Safety	-

Specifications

Model Name	DC-1200		
Model No.	DC-1200-N42		
System	Processor	Intel® Pentium® Processor N4200	
	Chipset	SOC	
	Memory	1x DDR3L, Up to 8GB	
I/O Interface	Video Output	1x DVI-D 1x DisplayPort Optional: 1x DVI-D, 1x VGA or 1x HDMI	
	LAN	2x GbE LAN	
	PoE+	Optional: 2x PoE+	
	Serial Port	2x RS232/422/485 Optional: 4 x RS232/422/485	
	USB	4x USB 3.2 Gen1	
	Optical Isolated DIO	Optional: 8x DIO (4x DI, 4x DO)	
	Audio	1x Line-Out 1x Mic-in	
	Remote Power On_Off / Reset	1 / 1	
	External FAN Connector	-	
	Other	-	
Storage	2.5" SSD / HDD Bay	1	
	mSATA	1	
	CFast	-	
Expansion	CFM / CMI Interface	2 / 2	
	PCI / PCIe	-	
	Mini PCI Express	2	
	M.2 Socket	-	
	Universal I/O Bracket	3	
	SIM Socket	2	
	Antenna Holes	2	
	Other	Power Ignition Sensing (IGN) Function	
Power Requirement	Power Input Voltage	AT/ATX, 9-48 VDC	
Physical	Dimension (WxDxH)	185 x 131 x 56.5 mm	
	Mounting	Wall / Side / DIN Rail / VESA	
Operating System	Windows	Windows 10	
Environment	Operating Temp.	-40°C to 70°C	
	Shock	50 Grms, According to IEC60068-2-27	
	Vibration	5 Grms, According to IEC60068-2-64	
	EMC	CE, FCC Class A, E-Mark	
	Safety	EN62368-1	

DE series
Power Efficient & Expandable

- Onboard Intel® Atom® SoC
- Supports PCI/PCIe Expansion Slots
- 2x Mini-PCIe slots for WLAN / WWAN / I/O expansion
- Power Ignition Sensing (IGN) Supported
- Power over Serial and Digital I/O Functionalities
- Wide Operating Temperature (-25℃ to 70℃)
- EN50155 (EN50121-3-2 Only) Certified

DE series fanless embedded computer integrates with Intel® Atom® Quad-Core processor. Delivering the excellent quad-core processing power at only 10 watts power consumption, DE series is definitely an ideal solution for ultimate computing performance, energy efficiency, and superior reliability. With rich I/O and rugged reliability, DE series meets various applications, such as surveillance, in-vehicle, factory automation and machine automation.

PCI, PCIe
and Mini-PCIe expansion

Expansion cards include PCI, PCIe, and Mini-PCIe interfaces which are suitable for different applications.
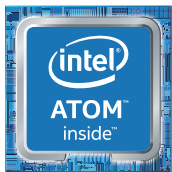
ONLY
10 Watts

Capable
and power-efficient

Intel® Atom® E3845 Quad-Core 1.91 GHz processor delivers quad-core processing power at only 10 watts power consumption.

Plentiful I/O options

DE series includes multiple I/O ports, such as USB, DIO, and COM. It also offers multiple I/O extension modules, including up to 2x PCI or 2x PCIe x1 slots for flexible integration of various add-on cards; 2x Mini-PCIe slots for GSM and WLAN wireless communication.

EN50121-3-2 certified

Compliant with EN50121-3-2 certification, explicitly designed to fulfill the demanding requirements for railway applications.

Specifications

Model Name	DE-1000
Model No.	DE-1000

System	Processor	Intel® Atom® Processor E3845
	Chipset	SOC
	Memory	1x DDR3L, Up to 8GB
I/O Interface	Video Output	1x DVI-I 1x DisplayPort
	LAN	2x GbE LAN
	PoE+	-
	Serial Port	6x RS232/422/485
	USB	1x USB 3.2 Gen1 4x USB 2.0
	Optical Isolated DIO	8x DIO(4x DI, 4x DO)
	Audio	1x Line-Out 1x Mic-In
	Remote Power On_Off / Reset	1 / 1
	External FAN Connector	-
	Other	-
Storage	2.5" SSD / HDD Bay	2
	mSATA	1
	CFast	1
Expansion	CFM / CMI Interface	- / -
	PCI / PCIe	-
	Mini PCI Express	2
	M.2 Socket	-
	Universal I/O Bracket	-
	SIM Socket	1
	Antenna Holes	2
	Other	-
Power Requirement	Power Input Voltage	AT/ATX, 9-48 VDC
Physical	Dimension (WxDxH)	203 x 200 x 65 mm
	Mounting	Wall / Side / VESA / DIN Rail
Operating System	Windows	Windows10, Windows8, Windows Embedded 8 Standard, Windows7, Windows Embedded Standard 7
Environment	Operating Temp.	-25℃ to 70℃
	Shock	50 Grms, According to IEC60068-2-27
	Vibration	5 Grms, According to IEC60068-2-64
	EMC	CE, FCC Class A, EN50155 (EN50121-3-2)
	Safety	EN62368-1

Specifications

Model Name	DE-1001		DE-1002	
Model No.	DE-1001-E	DE-1001-P	DE-1002-EE	DE-1002-PP
System Processor	Intel® Atom® Processor E3845			
Chipset	SOC			
Memory	1x DDR3L, Up to 8GB			
I/O Interface Video Output	1x DVI-I 1x DisplayPort			
LAN	2x GbE LAN			
PoE+	-			
Serial Port	6x RS232/422/485			
USB	1x USB 3.2 Gen1 4x USB 2.0			
Optical Isolated DIO	8x DIO(4x DI, 4x DO)			
Audio	1x Line-Out 1x Mic-In			
Remote Power On_Off / Reset	1 / 1			
External FAN Connector	-			
Other	-			
Storage 2.5" SSD / HDD Bay	2			
mSATA	1			
CFast	1			
Expansion CFM / CMI Interface	- / -			
PCI / PCIe	1x PCIex1	1x PCI	2x PCIex1	2x PCI
Mini PCI Express	2			
M.2 Socket	-			
Universal I/O Bracket	1		2	
SIM Socket	1			
Antenna Holes	2			
Other	-			
Power Requirement Power Input Voltage	AT/ATX, 9-48 VDC			
Physical Dimension (WxDxH)	203 x 200 x 96.5 mm		203 x 200 x 114.5 mm	
Mounting	Wall		Wall	
Operating System Windows	Windows10, Windows8, Windows Embedded 8 Standard, Windows7, Windows Embedded Standard 7			
Environment Operating Temp.	-25℃ to 70℃			
Shock	50 Grms, According to IEC60068-2-27			
Vibration	5 Grms, According to IEC60068-2-64			
EMC	CE, FCC Class A, EN50155 (EN50121-3-2)			
Safety	EN62368-1			

DI series

High Performance & Compact Size

- Onboard Mobile Intel® Core™ U-series Processor
- Triple Independent Display
- 2x Mini-PCIe slots for WLAN / WWAN / I/O expansion
- Up to 2x 2.5" SATA Drive Bays (RAID 0/1)
- CMI Technology for RJ45 / M12 / GbE LAN / COM / DIO
- CFM Technology for Power Ignition Sensing (IGN)
- Wide Operating Temperature (-40°C to 70°C)
- EN50155 (EN50121-3-2 Only) & E-Mark Certified

Cincoze's DI series stands for "DIAMOND Intelligent" and it is the first series which is designed for "high performance and compact" within Cincoze's product portfolio. The unique design of the DI series makes it ideal for harsh, space-limited and performance-required applications such as factory automation, machine vision, in-vehicle computing and mobile surveillance.

High performance
with low power consumption

It supports an Intel® Core™ mobile processor, features an Intel® graphics engine, and accommodates one DDR4 socket up to 32 GB. Only 15W power consumption makes the DI series suitable for harsh, space-limited, and performance-oriented applications.
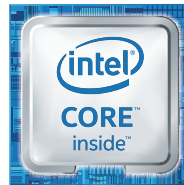
ONLY 15 Watts
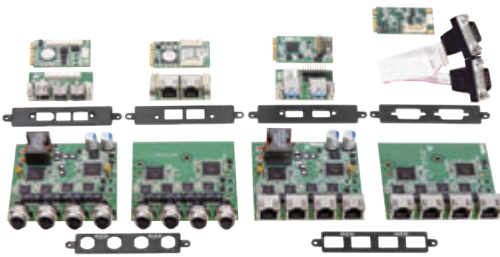
Modular expansion

Cincoze's unique CMI (Combined Multiple I/O), CFM (Control Function Module), and MEC (Mini-PCIe Card) technologies allow the DI series to be expanded as needed. Options for the ready-to-use modules include Multi-LAN, PoE, M12 connections, Power Ignition Sensing (IGN), and various other I/O interfaces.

Compact
with plentiful I/O

Extremely compact size (203 x 142 x 66.8 mm), comprising unbeatable I/O such as DVI-I, DP, LAN, COM, USB, Optical Isolated DIO, PS/2, Mic-in, Line-out, and remote power on/off switch.

International certifications

Compliant with E-Mark and EN50121-3-2 certifications, the DI series is designed to fulfill railway and vehicle applications' demanding requirements.

EN50121-3-2   E13

Specifications

Model Name	DI-1000		
Model No.	DI-1000-i3	DI-1000-i5	DI-1000-i7
System Processor	Intel® Core i3-6100U	Intel® Core i5-6300U	Intel® Core i7-6600U
Chipset	SOC		
Memory	1x DDR4, Up to 32GB		
I/O Interface Video Output	1x DVI-I 1x DisplayPort		
LAN	2x GbE LAN Optional: 4x GbE LAN		
PoE+	-		
Serial Port	6x RS-232/422/485		
USB	4x USB3.2 Gen1 2x USB2.0		
Optical Isolated DIO	8x DIO (4x DI, 4x DO)		
Audio	1x Mic-in 1x Line-out		
Remote Power On_Off / Reset	1 / -		
External FAN Connector	-		
Other	-		
Storage 2.5" SSD / HDD Bay	2		
mSATA	2		
CFast	-		
Expansion CFM / CMI Interface	1 / 1		
PCI / PCIe	-		
Mini PCI Express	2		
M.2 Socket	-		
Universal I/O Bracket	1		
SIM Socket	1		
Antenna Holes	4		
Other	Power Ignition Sensing (IGN) Function		
Power Requirement Power Input Voltage	AT/ATX, 9-48 VDC		
Physical Dimension (WxDxH)	203 x 142 x 66.8 mm		
Mounting	Wall / Side / DIN Rail / VESA		
Operating System Windows	Windows 10, Windows 8.1, Windows 7		
Environment Operating Temp.	-40℃ to 70℃		
Shock	50 Grms, According to IEC60068-2-27		
Vibration	5 Grms, According to IEC60068-2-64		
EMC	CE, FCC Class A, EN50155 (EN50121-3-2), E-mark		
Safety	-		

Specifications

Model Name	DI-1100		
Model No.			
System	Processor	Onboard 8th Intel® Core™ U Processors (Whiskey Lake) Intel® Core™ i7-8665UE , Intel® Core™ i5-8365UE , Intel® Core™ i3-8145UE	
	Chipset	SoC	
	Memory	1x DDR4, Up to 32GB	
I/O Interface	Video Output	1x HDMI 1x DisplayPort 1x VGA	
	LAN	2x GbE LAN Optional : 4x GbE LAN	
	PoE+	-	
	Serial Port	2x RS-232/422/485 Optional : 2x RS-232/422/485	
	USB	2x USB 3.2 Gen2 2x USB 3.2 Gen1 2x USB 2.0	
	Optical Isolated DIO	Optional : 16x DIO (8x DI, 8x DO)	
	Audio	1x Mic-in 1x Line-out	
	Remote Power On_Off / Reset	1 / 1	
	External FAN Connector	1	
	Other	1x PS/2, 1x Remote Power LED	
Storage	2.5" SSD / HDD Bay	1	
	mSATA	1	
	CFast	-	
Expansion	CFM / CMI Interface	1 / 2	
	PCI / PCIe	-	
	Mini PCI Express	2	
	M.2 Socket	-	
	Universal I/O Bracket	2	
	SIM Socket	2	
	Antenna Holes	3	
	Other	Power Ignition Sensing (IGN) Function	
Power Requirement	Power Input Voltage	AT/ATX, 9-48 VDC	
Physical	Dimension (WxDxH)	203 x 142 x 66.8 mm	
	Mounting	Wall / Side / DIN Rail / VESA	
Operating System	Windows	Windows 10	
Environment	Operating Temp.	-40℃ to 70℃	
	Shock	MIL-STD-810G	
	Vibration	MIL-STD-810G	
	EMC	CE, FCC, ICES-003 Class A, EN50121-3-2 (Railway), E-mark	
	Safety	IEC/EN62368-1	

DX series
Extreme Performance & Compact Size

- Supports Intel® Xeon®/Core™ Socket Type Processor
- Triple Independent Display
- Up to 4x Mini-PCIe Expansion Slots
- 2x 2.5" Hot Swap SATA Drive Bays (RAID 0/1)
- 2x GbE, 4x COM, 8x USB, Line-Out & Mic-In
- 3x CMI Interfaces for RJ45/M12 GbE LAN, COM & DIO
- 2x CFM Interfaces for Power Ignition Sensing (IGN) & PoE
- EN50155 (EN50121-3-2 Only) & E-Mark Certified

Cincoze's first rugged embedded computer, DX series, stands for "DIAMOND Extreme" and it is an extreme performance and compact computer powered by Intel® Xeon® and Core™ processors. This can bring outstanding performance for high-end applications and a wide range of processors for selection. With highly modular design, DX series support flexible modular I/O expansion, 2x front accessible HDD trays, and unlimited combinations for space-limited requirements.

Compact
with extreme performance

DX series is a compact embedded computer (242 x 173 x 77 mm) with the extreme performance of an Intel® Xeon® or Intel® Core™ CPU and support for up to 64 GB of DDR4 memory.

Highly modular expansion

In addition to the native I/O interfaces, Cincoze's exclusive CMI and CFM technology expands native options to include Power over Serial, DIO, LAN, PoE, M12, and more.

Application ready solution

Harnessing Cincoze's exclusive CFM technologies, the DX series can be configured instantly with Power-over-Ethernet and Power Ignition Sensing (IGN) Functions necessary for many industrial applications, such as intelligent machines, in-vehicle, transportation, and security & surveillance.

Intelligent Machine | In-Vehicle Computing | Transportation | Security & Surveillance
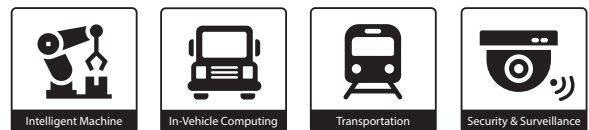
Industry certifications

DX series is certified with E-Mark and EN50121-3-2 for in-vehicle and railway use and other mission-critical applications.

EN50121-3-2   E13

Specifications

Model Name		DX-1000
Model No.		DX-1000
System	Processor	Intel® 7/6th Gen. Core i7/i5/i3 Processor
	Chipset	Intel® C236
	Memory	2x DDR4, Up to 64GB
I/O Interface	Video Output	1x DVI-I 2x DisplayPort
	LAN	2x GbE LAN Optional: 4x GbE LAN
	PoE+	Optional: 4x PoE+
	Serial Port	4x RS-232/422/485 Optional: 2x RS-232/422/485
	USB	8x USB3.2 Gen1
	Optical Isolated DIO	Optional: 16x DIO(8x DI, 8x DO)
	Audio	1x Mic-in, 1x Line-out
	Remote Power On_Off / Reset	1 / -
	External FAN Connector	1
Storage	2.5" SSD / HDD Bay	2
	mSATA	4
	CFast	-
Expansion	CFM / CMI Interface	1 / 3
	Mini PCI Express	4
	M.2 Socket	-
	Universal I/O Bracket	4
	SIM Socket	1
	Antenna Holes	3
	Other	Power Ignition Sensing (IGN) Function
Power Requirement	Power Input Voltage	AT/ATX, 9-48 VDC
Physical	Dimension (WxDxH)	242 x 174 x 77 mm
	Mounting	Wall / Side / DIN Rail / VESA
Operating System	Windows	7th Gen. : Windows 10 6th Gen. : Windows 10, Windows 8.1, Windows 7
Environment	Operating Temp.	7th Gen : 35 W CPU: -40℃ to 50℃ / 51 to 65 W CPU: -40℃ to 45℃ / 73 W CPU: -40℃ to 40℃ 6th Gen : 35 W CPU: -40℃ to 70℃ / 51 to 65 W CPU: -40℃ to 55℃ / 80 W CPU: -40℃ to 40℃
	Shock	50 Grms, According to IEC60068-2-27
	Vibration	5 Grms, According to IEC60068-2-64
	EMC	CE, FCC Class A, EN50155 (EN50121-3-2), E-mark
	Safety	-

Specifications

Model Name	DX-1100		
Model No.	DX-1100		
System	Processor	Intel® 9/8th Gen. Core i7/i5/i3 Processor	
	Chipset	Intel® C246	
	Memory	2x DDR4, Up to 64GB	
I/O Interface	Video Output	1x DVI-I 1x DisplayPort 1x HDMI	
	LAN	2x GbE LAN Optional: 4x GbE LAN	
	PoE+	Optional: 4x PoE+	
	Serial Port	4x RS-232/422/485 Optional: 2x RS-232/422/485	
	USB	2x USB3.2 Gen2 6x USB3.2 Gen1	
	Optical Isolated DIO	Optional: 16x DIO (8x DI, 8x DO)	
	Audio	1x Mic-in, 1x Line-out	
	Remote Power On_Off / Reset	1 / -	
	External FAN Connector	1	
Storage	2.5" SSD / HDD Bay	2	
	mSATA	3	
	CFast	-	
Expansion	CFM / CMI Interface	1 / 3	
	Mini PCI Express	3	
	M.2 Socket	1x M.2 E Key	
	Universal I/O Bracket	4	
	SIM Socket	1	
	Antenna Holes	3	
	Other	Power Ignition Sensing (IGN) Function	
Power Requirement	Power Input Voltage	AT/ATX, 9-48 VDC	
Physical	Dimension (WxDxH)	242 x 174 x 77 mm	
	Mounting	Wall / Side / DIN Rail / VESA	
Operating System	Windows	Windows 10	
Environment	Operating Temp.	35 W CPU: -40℃ to 70℃, 54 to 65 W CPU: -40℃ to 45℃, 71 to 80 W CPU: -40℃ to 40℃	
	Shock	50 Grms, According to IEC60068-2-27	
	Vibration	5 Grms, According to IEC60068-2-64	
	EMC	CE, FCC Class A, EN50155 (EN50121-3-2), E-mark	
	Safety	EN62368-1	

DS series

Extreme Performance & Expandable

- Supports Intel® Xeon®/Core™ Socket Type Processor
- Supports PCI/PCIe Expansion Slots
- Triple Independent Display
- 3x Mini-PCIe Expansion Slots
- 2x 2.5" SATA Drive Bays (RAID 0/1)
- Wide Operating Temperature (-40°C - 70°C)
- CMI Technology for RJ45/M12 GbE LAN, COM & DIO
- CFM Technology for Power Ignition Sensing (IGN)
- EN50155 (EN50121-3-2 Only) & E-Mark Certified

Cincoze DS series is an extreme performance fanless embedded computer powered by Intel® Xeon® or Core™ processor supporting a wide range of socket-type workstation and desktop CPUs and accommodates two memory sockets up to 64 GB which allows DS series to fulfill all kinds of high-end computing requirements. DS series also supports a maximum of two PCI/PCIe expansion slots with the different combination of interfaces for expanding all kinds of application add-on cards. DS series is truly a rugged computer with features of wide operating temperature, wide range DC power input (from 9V to 48V), high tolerance of shock and vibration and high-standard industrial protections.

Extreme performance

DS series supports a wide range of Intel® Xeon® and Intel® Core™ socket-type workstation and CPUs and accommodates up to two memory sticks of 32 GB each (64 GB total) for all kinds of high-end computing applications.
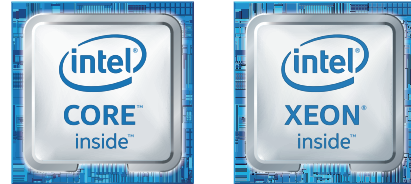
PCI / PCIe expandable

DS series has various expansion interfaces, including PCI, PCIe, and Mini-PCIe expansion slots.

Rich I/O & fully modular design

DS series incorporates various I/O ports, such as GbE, USB 3.2, DVI-I, DisplayPort, and M.2 Key socket for ultra-fast data transfer speed. Moreover, it can combine CMI, MEC, and CFM interfaces to provide great expansion capability and system flexibility.
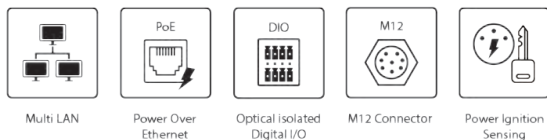
Application driven

Cincoze's unique CMI (Combined Multiple I/O), CFM (Control Function Module), and MEC (Mini-PCIe Card) technologies allow the DS series to be expanded according to specific needs, including Multi-LAN, PoE, DIO, M12 connections, Power Ignition Sensing (IGN) and various types of I/O interface. An external fan is also available.

Specifications

Model Name	DS-1100	DS-1101	DS-1102
Model No.	DS-1100	DS-1101	DS-1102
System — Processor	Intel® 7/6th Gen. Core i7/i5/i3 Processor		
System — Chipset	Intel® Q170		
System — Memory	2x DDR4, Up to 64GB		
I/O Interface — Video Output	1x DVI-I, 2x DisplayPort		
I/O Interface — LAN	2x GbE LAN Optional : 4x GbE LAN		
I/O Interface — PoE+	Optional : 4x PoE+		
I/O Interface — Serial Port	2x RS-232/422/485 Optional : 4x RS-232/422/485		
I/O Interface — USB	6x USB3.2 Gen1 2x USB2.0		
I/O Interface — Optical Isolated DIO	Optional : 8x DIO (4x DI, 4x DO)		
I/O Interface — Audio	1x Mic-in, 1x Line-out		
I/O Interface — Remote Power On_Off / Reset	1 / 1		
I/O Interface — External FAN Connector	1		
Storage — 2.5" SSD / HDD Bay	2		
Storage — mSATA	3		
Expansion — CFM / CMI Interface	1 / 2		
Expansion — PCI / PCIe	-	Optional: 1x PCIex16 or 1x PCI	Optional: 1x PCIex16 + 1x PCIex1, 1x PCIex16 + 1x PCI, 2x PCIex8, or 2x PCI
Expansion — Mini PCI Express	3		
Expansion — M.2 Socket	-		
Expansion — Universal I/O Bracket	3	3	4
Expansion — SIM Socket	1		
Expansion — Antenna Holes	2		
Expansion — Other	Power Ignition Sensing (IGN) Function		
Power Requirement — Power Input Voltage	AT/ATX, 9-48 VDC		
Physical — Dimension (WxDxH)	227 x 261 x 88 mm	227 x 261 x 108 mm	227 x 261 x 128 mm
Physical — Mounting	Wall		
Operating System — Windows	7th Gen. : Windows 10 6th Gen. : Windows 10, Windows 8.1, Windows 7		
Environment — Operating Temp.	7th Gen: 35 W CPU: -40℃ to 50℃, 51 to 65 W CPU: -40℃ to 45℃ 6th Gen: 35 W CPU: -40℃ to 70℃, 51 to 65 W CPU: -40℃ to 50℃		
Environment — Shock	50 Grms, According to IEC60068-2-27		
Environment — Vibration	5 Grms, According to IEC60068-2-64		
Environment — EMC	CE, FCC Class A, E-mark, EN50155(EN50121-3-2)		
Environment — Safety	EN62368-1		

Specifications

Model Name		DS-1200	DS-1201	DS-1202
	Model No.	DS-1200	DS-1201	DS-1202
System	Processor	Intel® 9/8th Gen. Core i7/i5/i3 Processor		
	Chipset	Intel® Q370		
	Memory	2x DDR4, Up to 64GB		
I/O Interface	Video Output	1x DVI-I, 2x DisplayPort		
	LAN	2x GbE LAN Optional : 4x GbE LAN		
	PoE+	Optional : 4x PoE+		
	Serial Port	2x RS-232/422/485 Optional : 4x RS-232/422/485		
	USB	2x USB3.2 Gen2 4x USB3.2 Gen1 2x USB2.0		
	Optical Isolated DIO	Optional : 16x DIO (8x DI, 8x DO)		
	Audio	1x Mic-in, 1x Line-out		
	Remote Power On_Off / Reset	1 / 1		
	External FAN Connector	1		
Storage	2.5" SSD / HDD Bay	2		
	mSATA	3		
Expansion	CFM / CMI Interface	1 / 4		
	PCI / PCIe	-	Optional: 1x PCIex16 or 1x PCI	Optional: 1x PCIex16 + 1x PCIex1, 1x PCIex16 + 1x PCI, 2x PCIex8 or 2x PCI
	Mini PCI Express	3		
	M.2 Socket	1x M.2 M Key		
	Universal I/O Bracket	4	4	5
	SIM Socket	2		
	Antenna Holes	2		
	Other	Power Ignition Sensing (IGN) Function		
Power Requirement	Power Input Voltage	AT/ATX, 9-48 VDC		
Physical	Dimension (WxDxH)	227 x 261 x 88 mm	227 x 261 x 108 mm	227 x 261 x 128 mm
	Mounting	Wall		
Operating System	Windows	Windows 10		
Environment	Operating Temp.	35 W CPU: -40°C to 70°C 51 to 65 W CPU: -40°C to 45°C		
	Shock	50 Grms, According to IEC60068-2-27		
	Vibration	5 Grms, According to IEC60068-2-64		
	EMC	CE, FCC Class A, E-mark, EN50155(EN50121-3-2)		
	Safety	EN62368-1		

Specifications

Model Name		DS-1300
Model No.		DS-1300
System	Processor	Intel® 10th Gen: Xeon Processor, Core i9/i7/i5/i3 Processor, Pentium Processor
	Chipset	Intel® W480E
	Memory	2x DDR4, Up to 64GB
I/O Interface	Video Output	1 x HDMI, 2 x DisplayPort, 1 x VGA
	LAN	2x GbE LAN Optional : 4x GbE LAN
	PoE+	Optional : 4x PoE+
	Serial Port	2x RS-232/422/485 Optional : 2x RS-232/422/485
	USB	2x USB 3.2 Gen2 2x USB 3.2 Gen1 2x USB 2.0
	Optical Isolated DIO	Optional : 16x DIO(8x DI, 8x DO)
	Audio	1 x Line-out, 1 x Mic-in
	Remote Power On_Off / Reset	1 / 1
	External FAN Connector	1
	Other	1x Remote Power LED
Storage	2.5" SSD / HDD Bay	2
	mSATA	3
Expansion	CFM / CMI Interface	1 / 4
	PCI / PCIe	-
	Mini PCI Express	3
	M.2 Socket	1x M.2 M Key
	Universal I/O Bracket	4
	SIM Socket	2
	Antenna Holes	2
	Other	Power Ignition Sensing (IGN) Function
Power Requirement	Power Input Voltage	AT/ATX, 9 - 48VDC
Physical	Dimension (WxDxH)	227 x 261 x 88 mm
	Mounting	Wall
Operating System	Windows	Windows 10
Environment	Operating Temp.	35 W CPU : -40℃ to 70℃ 51 to 65W CPU : -40℃ to 50℃ 80 W CPU : -40℃ to 40℃
	Shock	MIL-STD-810G
	Vibration	MIL-STD-810G
	EMC	CE, FCC, ICES-003 Class A, EN50121-3-2 (Railway)
	Safety	IEC/EN62368-1

Specifications

Model Name	DS-1301	DS-1302
Model No.	DS-1301	DS-1302
System Processor	Intel® 10th Gen: Xeon Processor, Core i9/i7/i5/i3 Processor, Pentium Processor	
Chipset	Intel® W480E	
Memory	2x DDR4, Up to 64GB	
I/O Interface Video Output	1 x HDMI, 2 x DisplayPort, 1 x VGA	
LAN	2x GbE LAN Optional : 4x GbE LAN	
PoE+	Optional : 4x PoE+	
Serial Port	2x RS-232/422/485 Optional : 2x RS-232/422/485	
USB	2x USB 3.2 Gen2 2x USB 3.2 Gen1 2x USB 2.0	
Optical Isolated DIO	Optional : 16x DIO(8x DI, 8x DO)	
Audio	1 x Line-out, 1 x Mic-in	
Remote Power On_Off / Reset	1 / 1	
External FAN Connector	1	
Other	1x Remote Power LED	
Storage 2.5" SSD / HDD Bay	2	
mSATA	3	
Expansion CFM / CMI Interface	1 / 4	
PCI / PCIe	Optional: 1x PCIex16 or 1x PCI	Optional: 1x PCIex16 + 1x PCIex1, 1x PCIex16 + 1x PCI, 2x PCIex8 or 2x PCI
Mini PCI Express	3	
M.2 Socket	1x M.2 M Key	
Universal I/O Bracket	4	5
SIM Socket	2	
Antenna Holes	2	
Other	Power Ignition Sensing (IGN) Function	
Power Requirement Power Input Voltage	AT/ATX, 9 - 48VDC	
Physical Dimension (WxDxH)	227 x 261 x 108 mm	227 x 261 x 128 mm
Mounting	Wall	
Operating System Windows	Windows 10	
Environment Operating Temp.	35 W CPU : -40°C to 70°C 51 to 65 W CPU : -40°C to 50°C 80 W CPU : -40°C to 40°C	
Shock	MIL-STD-810G	
Vibration	MIL-STD-810G	
EMC	CE, FCC, ICES-003 Class A, EN50121-3-2 (Railway)	
Safety	IEC/EN62368-1	

CRYSTAL Product Line
Modular Panel PC & Industrial Monitor

Industrial Grade Design

Features include IP65 rated die-cast aluminum front bezel, wide operating temperatures, and many industrial-grade protections for harsh environment protection.

Innovative Technology (CDS)

Taking advantage of Cincoze's patent CDS technology, it offers the various possibilities of upgrading the computer module and changing the display module. Compared to regular panel PCs, the unique modular design is convenient and reduces maintenance costs dramatically.

Versatile Functions

Cincoze solutions are available with various brightness panels and touchscreen types. Multiple I/O and application driven functions fulfill various industrial applications.

Numerous Sizes and Multiple Options

Our comprehensive selection of sizes and configurations provides a one-stop-shop for any industrial panel PC or monitor application. Cincoze Crystal panel PCs are offered in sizes from 8- to 24-inch, in 4:3 and 16:9 aspect ratios, and with optional multi-point projected capacitive (P-CAP) or single-point resistive touchscreen. All processor options are covered, ranging from low-power Intel® Atom® through the Pentium® range and up to the high-performance Core™ series.

Cincoze industrial panel PCs and monitors are available in a wide selection of display size, backlight brightness, touch type and computer performance. Our industrial panel PCs and monitors are designed with innovative technologies, highest industrial standard and extensive functionalities that fulfill the needs for a wide range of applications.

With Cincoze's patented CDS (Convertible Display System) technology and modular design, on-site maintenance and future upgradability are easier than ever by deploying our panel PCs and monitors.

CV-100+P2000 series / CV-100+P1000 series
Industrial Modular Panel PC

CS-100+P2000 series / CS-100+P1000 series
Sunlight Readable Modular Panel PC

CV-100+M1000 series
Industrial Monitor

CS-100+M1000 series
Sunlight Readable Monitor

P2000 series / P1000 series / M1000 series
CV-100 series / CS-100 series
Convertible Embedded System

CV-100 / P2000 series
High Performance Modular Panel PC

- 12.1" to 24" TFT-LCD with 5-wire Resistive, P-Cap Touch or Glass Only
  (Available on Selected Models)
- Onboard Mobile Intel® Core™ U-series Processor
- Rugged Aluminum Die-cast Front Bezel with IP65 Front Panel Protection
- 2x GbE LAN, 4x COM, 5x USB, 16x Isolated DIO
- Mini-PCIe Expansion Slot interconnected with SIM Card Holder
- CFM Technology for PoE and Power Ignition Sensing (IGN) Functions
- PCI/PCIe Expandable Version Available

Cincoze CV-100/P2000 series is a high-performance fanless and jumperless rugged touch panel PC powered by U series Intel® Core™ processor, offering more computing power, faster data processing and enhanced graphics performance while consuming only 15W of power. A wide selection of display sizes from 12.1″ to 24″ with aspect ratios of 4:3 or 16:9 are available.

The CV-100/P2000 series supports CFM (Control Function Module) technology, Cincoze's own defined interface with integrated power boost and control signal that allows you to extend PoE and power ignition sensing (IGN) functions with additional CFM boards.

High Performance
Per Watt

Powered by an ultra-low power Intel® Core™ U-series CPU, the CV-100/P2000 series has dramatically increased computing performance while retaining maximum power efficiency.

Flexible Expansion

CV-100/P2000 series provides high expandability through PCI/PCIe and Mini-PCIe slots, which can be used to install various add-on cards to fulfill different application needs.

Rugged and Reliable Design

Featuring extensive I/Os, wide range power input, wide operating temperature, integrated SuperCap, instant reboot, and IP65 rated front panel, the CV-100/P2000 series is an ideal choice for various industrial applications.

9-48 VDC	Rich I/O	SuperCap	Instant Reboot
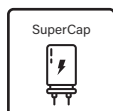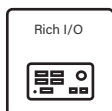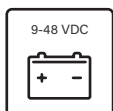
Specifications

Model Name	CV-112H/P2102			
Model No.	CV-112HR/P2102-i5 CV-112HR/P2102-i3	CV-112HR/P2102E-i5 CV-112HR/P2102E-i3	CV-112HC/P2102-i5 CV-112HC/P2102-i3	CV-112HC/P2102E-i5 CV-112HC/P2102E-i3
Display — LCD Size	12.1" TFT-LCD			
Max. Resolution	1024 x 768			
Brightness (cd/m2)	500			
Backlight MTBF	30,000 hrs (LED Backlight)			
Touch — Resistive 5-wire	V		-	
Projected Capacitive	-		V	
System — Processor	Intel® Core™ i5-8365UE , Intel® Core™ i3-8145UE			
Chipset	SoC			
Memory	2x DDR4 , Up to 64GB			
I/O Interface — Video Output	1x VGA , 1x DisplayPort , 1x CDS			
LAN	2x GbE LAN			
PoE+	Optional: 2x PoE+			
Serial Port	4x RS-232/422/485			
USB	3x USB3.2 , 2x USB2.0			
Isolated DIO	16x DIO (8x DI, 8x DO)			
Audio	1x Mic-in , 1x Speaker-out			
Remote Power On_Off / Reset	1 / 1			
External FAN Connector	-			
Storage — 2.5" HDD/SSD Drive Bay	2			
mSATA	-			
CFast	-			
Expansion — CDS Interface	1		1	
CFM / CMI Interface	2 / 0		2 / 0	
PCI / PCIe	-	Optional: 1x PCI or 1x PCIex4	-	Optional: 1x PCI or 1x PCIex4
Mini PCI Express	2		2	
M.2	1x M.2 2230 E Key		1x M.2 2230 E Key	
Universal I/O Bracket	-	2	-	2
SIM Socket	1		1	
Antenna Holes	4		4	
Other	Power Ignition Sensing (IGN) Function		Power Ignition Sensing (IGN) Function	
Power Requirement — Power Input Voltage	AT/ATX, 9-48 VDC			
Physical — Dimension (WxDxH)	345 x 265.3 x 69.5 mm	345 x 265.3 x 89 mm	345 x 265.3 x 69.5 mm	345 x 265.3 x 89 mm
Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)			
Operating System — Windows	Windows 10			
Environment — Operating Temp.	-30℃ to 70℃		-30℃ to 70℃	
Shock	15 Grms, According to IEC60068-2-27			
Vibration	1.5 Grms, According to IEC60068-2-64			
Front Panel Protection	IP65 Compliant			
EMC	CE, FCC Class A			
Safety	-			

Specifications

Model Name	CV-115/P2102			
Model No.	CV-115R/P2102-i5 CV-115R/P2102-i3	CV-115R/P2102E-i5 CV-115R/P2102E-i3	CV-115C/P2102-i5 CV-115C/P2102-i3	CV-115C/P2102E-i5 CV-115C/P2102E-i3
Display — LCD Size	15" TFT-LCD			
Max. Resolution	1024 x 768			
Brightness (cd/m2)	350			
Backlight MTBF	50,000 hrs (LED Backlight)			
Touch — Resistive 5-wire	V		-	
Projected Capacitive	-		V	
System — Processor	Intel® Core™ i5-8365UE , Intel® Core™ i3-8145UE			
Chipset	SoC			
Memory	2x DDR4 , Up to 64GB			
I/O Interface — Video Output	1x VGA , 1x DisplayPort , 1x CDS			
LAN	2x GbE LAN			
PoE+	Optional: 2x PoE+			
Serial Port	4x RS-232/422/485			
USB	3x USB3.2 , 2x USB2.0			
Isolated DIO	16x DIO (8x DI, 8x DO)			
Audio	1x Mic-in , 1x Speaker-out			
Remote Power On_Off / Reset	1 / 1			
External FAN Connector	-			
Storage — 2.5" HDD/SSD Drive Bay	2			
mSATA	-			
CFast	-			
Expansion — CDS Interface	1		1	
CFM / CMI Interface	2 / 0		2 / 0	
PCI / PCIe	-	Optional: 1x PCI or 1x PCIex4	-	Optional: 1x PCI or 1x PCIex4
Mini PCI Express	2		2	
M.2	1x M.2 2230 E Key		1x M.2 2230 E Key	
Universal I/O Bracket	-	2	-	2
SIM Socket	1		1	
Antenna Holes	4		4	
Other	Power Ignition Sensing (IGN) Function		Power Ignition Sensing (IGN) Function	
Power Requirement — Power Input Voltage	AT/ATX, 9-48 VDC			
Physical — Dimension (WxDxH)	408 x 312.4 x 72 mm	408 x 312.4 x 91.5 mm	408 x 312.4 x 72 mm	408 x 312.4 x 91.5 mm
Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)			
Operating System — Windows	Windows 10			
Environment — Operating Temp.	-20°C to 65°C		-20°C to 65°C	
Shock	15 Grms, According to IEC60068-2-27			
Vibration	1.5 Grms, According to IEC60068-2-64			
Front Panel Protection	IP65 Compliant			
EMC	CE, FCC Class A			
Safety	-			

Specifications

Model Name	CV-117/P2102			
Model No.	CV-117R/P2102-i5 CV-117R/P2102-i3	CV-117R/P2102E-i5 CV-117R/P2102E-i3	CV-117C/P2102-i5 CV-117C/P2102-i3	CV-117C/P2102E-i5 CV-117C/P2102E-i3
Display — LCD Size	17" TFT-LCD			
Max. Resolution	1280 x 1024			
Brightness (cd/m2)	350			
Backlight MTBF	50,000 hrs (LED Backlight)			
Touch — Resistive 5-wire	V		-	
Projected Capacitive	-		V	
System — Processor	Intel® Core™ i5-8365UE , Intel® Core™ i3-8145UE			
Chipset	SoC			
Memory	2x DDR4 , Up to 64GB			
I/O Interface — Video Output	1x VGA , 1x DisplayPort , 1x CDS			
LAN	2x GbE LAN			
PoE+	Optional: 2x PoE+			
Serial Port	4x RS-232/422/485			
USB	3x USB3.2 , 2x USB2.0			
Isolated DIO	16x DIO (8x DI, 8x DO)			
Audio	1x Mic-in , 1x Speaker-out			
Remote Power On_Off / Reset	1 / 1			
External FAN Connector	-			
Storage — 2.5" HDD/SSD Drive Bay	2			
mSATA	-			
CFast	-			
Expansion — CDS Interface	1		1	
CFM / CMI Interface	2 / 0		2 / 0	
PCI / PCIe	-	Optional: 1x PCI or 1x PCIex4	-	Optional: 1x PCI or 1x PCIex4
Mini PCI Express	2		2	
M.2	1x M.2 2230 E Key		1x M.2 2230 E Key	
Universal I/O Bracket	-	2	-	2
SIM Socket	1		1	
Antenna Holes	4		4	
Other	Power Ignition Sensing (IGN) Function		Power Ignition Sensing (IGN) Function	
Power Requirement — Power Input Voltage	AT/ATX, 9-48 VDC			
Physical — Dimension (WxDxH)	450 x 350 x 76 mm	450 x 350 x 95.5 mm	450 x 350 x 76 mm	450 x 350 x 95.5 mm
Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)			
Operating System — Windows	Windows 10			
Environment — Operating Temp.	-20℃ to 70℃		-20℃ to 70℃	
Shock	15 Grms, According to IEC60068-2-27			
Vibration	1.5 Grms, According to IEC60068-2-64			
Front Panel Protection	IP65 Compliant			
EMC	CE, FCC Class A			
Safety	-			

Specifications

Model Name	CV-117/P2102	
Model No.	CV-117G/P2102-i5 CV-117G/P2102-i3	CV-117G/P2102E-i5 CV-117G/P2102E-i3
Display LCD Size	17" TFT-LCD	
Max. Resolution	1280 x 1024	
Brightness (cd/m2)	350	
Backlight MTBF	50,000 hrs (LED Backlight)	
Touch Resistive 5-wire	-	
Projected Capacitive	-	
System Processor	Intel® Core™ i5-8365UE , Intel® Core™ i3-8145UE	
Chipset	SoC	
Memory	2x DDR4 , Up to 64GB	
I/O Interface Video Output	1x VGA , 1x DisplayPort , 1x CDS	
LAN	2x GbE LAN	
PoE+	Optional: 2x PoE+	
Serial Port	4x RS-232/422/485	
USB	3x USB3.2 , 2x USB2.0	
Isolated DIO	16x DIO (8x DI, 8x DO)	
Audio	1x Mic-in , 1x Speaker-out	
Remote Power On_Off / Reset	1 / 1	
External FAN Connector	-	
Storage 2.5" HDD/SSD Drive Bay	2	
mSATA	-	
CFast	-	
Expansion CDS Interface	1	
CFM / CMI Interface	2 / 0	
PCI / PCIe	-	Optional: 1x PCI or 1x PCIex4
Mini PCI Express	2	
M.2	1x M.2 2230 E Key	
Universal I/O Bracket	-	2
SIM Socket	1	
Antenna Holes	4	
Other	Power Ignition Sensing (IGN) Function	
Power Requirement Power Input Voltage	AT/ATX, 9-48 VDC	
Physical Dimension (WxDxH)	450 x 350 x 76 mm	450 x 350 x 95.5 mm
Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)	
Operating System Windows	Windows 10	
Environment Operating Temp.	-30℃ to 70℃	
Shock	15 Grms, According to IEC60068-2-27	
Vibration	1.5 Grms, According to IEC60068-2-64	
Front Panel Protection	IP65 Compliant	
EMC	CE, FCC Class A	
Safety	-	

Specifications

Model Name	CV-119/P2102			
Model No.	CV-119R/P2102-i5 CV-119R/P2102-i3	CV-119R/P2102E-i5 CV-119R/P2102E-i3	CV-119C/P2102-i5 CV-119C/P2102-i3	CV-119C/P2102E-i5 CV-119C/P2102E-i3
Display — LCD Size	19" TFT-LCD			
Display — Max. Resolution	1280 x 1024			
Display — Brightness (cd/m2)	350			
Display — Backlight MTBF	50,000 hrs (LED Backlight)			
Touch — Resistive 5-wire	V		-	
Touch — Projected Capacitive	-		V	
System — Processor	Intel® Core™ i5-8365UE , Intel® Core™ i3-8145UE			
System — Chipset	SoC			
System — Memory	2x DDR4 , Up to 64GB			
I/O Interface — Video Output	1x VGA , 1x DisplayPort , 1x CDS			
I/O Interface — LAN	2x GbE LAN			
I/O Interface — PoE+	Optional: 2x PoE+			
I/O Interface — Serial Port	4x RS-232/422/485			
I/O Interface — USB	3x USB3.2 , 2x USB2.0			
I/O Interface — Isolated DIO	16x DIO (8x DI, 8x DO)			
I/O Interface — Audio	1x Mic-in , 1x Speaker-out			
I/O Interface — Remote Power On_Off / Reset	1 / 1			
I/O Interface — External FAN Connector	-			
Storage — 2.5" HDD/SSD Drive Bay	2			
Storage — mSATA	-			
Storage — CFast	-			
Expansion — CDS Interface	1		1	
Expansion — CFM / CMI Interface	2 / 0		2 / 0	
Expansion — PCI / PCIe	-	Optional: 1x PCI or 1x PCIex4	-	Optional: 1x PCI or 1x PCIex4
Expansion — Mini PCI Express	2		2	
Expansion — M.2	1x M.2 2230 E Key		1x M.2 2230 E Key	
Expansion — Universal I/O Bracket	-	2	-	2
Expansion — SIM Socket	1		1	
Expansion — Antenna Holes	4		4	
Expansion — Other	Power Ignition Sensing (IGN) Function		Power Ignition Sensing (IGN) Function	
Power Requirement — Power Input Voltage	AT/ATX, 9-48 VDC			
Physical — Dimension (WxDxH)	510 x 389.3 x 76 mm	510 x 389.3 x 95.5 mm	510 x 389.3 x 76 mm	510 x 389.3 x 95.5 mm
Physical — Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)			
Operating System — Windows	Windows 10			
Environment — Operating Temp.	-20℃ to 60℃		-20℃ to 60℃	
Environment — Shock	15 Grms, According to IEC60068-2-27			
Environment — Vibration	1.5 Grms, According to IEC60068-2-64			
Environment — Front Panel Protection	IP65 Compliant			
Environment — EMC	CE, FCC Class A			
Environment — Safety	-			

Specifications

Model Name	CV-119/P2102	
Model No.	CV-119G/P2102-i5 CV-119G/P2102-i3	CV-119G/P2102E-i5 CV-119G/P2102E-i3
Display — LCD Size	19" TFT-LCD	
Display — Max. Resolution	1280 x 1024	
Display — Brightness (cd/m2)	350	
Display — Backlight MTBF	50,000 hrs (LED Backlight)	
Touch — Resistive 5-wire	-	
Touch — Projected Capacitive	-	
System — Processor	Intel® Core™ i5-8365UE , Intel® Core™ i3-8145UE	
System — Chipset	SoC	
System — Memory	2x DDR4 , Up to 64GB	
I/O Interface — Video Output	1x VGA , 1x DisplayPort , 1x CDS	
I/O Interface — LAN	2x GbE LAN	
I/O Interface — PoE+	Optional: 2x PoE+	
I/O Interface — Serial Port	4x RS-232/422/485	
I/O Interface — USB	3x USB3.2 , 2x USB2.0	
I/O Interface — Isolated DIO	16x DIO (8x DI, 8x DO)	
I/O Interface — Audio	1x Mic-in , 1x Speaker-out	
I/O Interface — Remote Power On_Off / Reset	1 / 1	
I/O Interface — External FAN Connector	-	
Storage — 2.5" HDD/SSD Drive Bay	2	
Storage — mSATA	-	
Storage — CFast	-	
Expansion — CDS Interface	1	
Expansion — CFM / CMI Interface	2 / 0	
Expansion — PCI / PCIe	-	Optional: 1x PCI or 1x PCIex4
Expansion — Mini PCI Express	2	
Expansion — M.2	1x M.2 2230 E Key	
Expansion — Universal I/O Bracket	-	2
Expansion — SIM Socket	1	
Expansion — Antenna Holes	4	
Expansion — Other	Power Ignition Sensing (IGN) Function	
Power Requirement — Power Input Voltage	AT/ATX, 9-48 VDC	
Physical — Dimension (WxDxH)	510 x 389.3 x 76 mm	510 x 389.3 x 95.5 mm
Physical — Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)	
Operating System — Windows	Windows 10	
Environment — Operating Temp.	-20℃ to 60℃	
Environment — Shock	15 Grms, According to IEC60068-2-27	
Environment — Vibration	1.5 Grms, According to IEC60068-2-64	
Environment — Front Panel Protection	IP65 Compliant	
Environment — EMC	CE, FCC Class A	
Environment — Safety	-	

Specifications

Model Name	CV-W115/P2102	
Model No.	CV-W115R/P2102-i5 CV-W115R/P2102-i3	CV-W115R/P2102E-i5 CV-W115R/P2102E-i3
Display — LCD Size	15.6" TFT-LCD	
Max. Resolution	1366 x 768	
Brightness (cd/m2)	400	
Backlight MTBF	50,000 hrs (LED Backlight)	
Touch — Resistive 5-wire	V	
Projected Capacitive	-	
System — Processor	Intel® Core™ i5-8365UE , Intel® Core™ i3-8145UE	
Chipset	SoC	
Memory	2x DDR4 , Up to 64GB	
I/O Interface — Video Output	1x VGA , 1x DisplayPort , 1x CDS	
LAN	2x GbE LAN	
PoE+	Optional: 2x PoE+	
Serial Port	4x RS-232/422/485	
USB	3x USB3.2 , 2x USB2.0	
Isolated DIO	16x DIO (8x DI, 8x DO)	
Audio	1x Mic-in , 1x Speaker-out	
Remote Power On_Off / Reset	1 / 1	
External FAN Connector	-	
Storage — 2.5" HDD/SSD Drive Bay	2	
mSATA	-	
CFast	-	
Expansion — CDS Interface	1	
CFM / CMI Interface	2 / 0	
PCI / PCIe	-	Optional: 1x PCI or 1x PCIex4
Mini PCI Express	2	
M.2	1x M.2 2230 E Key	
Universal I/O Bracket	-	2
SIM Socket	1	
Antenna Holes	4	
Other	Power Ignition Sensing (IGN) Function	
Power Requirement — Power Input Voltage	AT/ATX, 9-48 VDC	
Physical — Dimension (WxDxH)	420 x 254 x 79 mm	420 x 254 x 98.5 mm
Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)	
Operating System — Windows	Windows 10	
Environment — Operating Temp.	-20°C to 60°C	
Shock	15 Grms, According to IEC60068-2-27	
Vibration	1.5 Grms, According to IEC60068-2-64	
Front Panel Protection	IP65 Compliant	
EMC	CE, FCC Class A	
Safety	-	

Specifications

Model Name	CV-W115/P2102		
Model No.	CV-W115C/P2102-i5 CV-W115C/P2102-i3		CV-W115C/P2102E-i5 CV-W115C/P2102E-i3
Display	LCD Size	15.6" TFT-LCD		
	Max. Resolution	1366 x 768		
	Brightness (cd/m2)	400		
	Backlight MTBF	50,000 hrs (LED Backlight)		
Touch	Resistive 5-wire	-		
	Projected Capacitive	V		
System	Processor	Intel® Core™ i5-8365UE , Intel® Core™ i3-8145UE		
	Chipset	SoC		
	Memory	2x DDR4 , Up to 64GB		
I/O Interface	Video Output	1x VGA , 1x DisplayPort , 1x CDS		
	LAN	2x GbE LAN		
	PoE+	Optional: 2x PoE+		
	Serial Port	4x RS-232/422/485		
	USB	3x USB3.2 , 2x USB2.0		
	Isolated DIO	16x DIO (8x DI, 8x DO)		
	Audio	1x Mic-in , 1x Speaker-out		
	Remote Power On_Off / Reset	1 / 1		
	External FAN Connector	-		
Storage	2.5" HDD/SSD Drive Bay	2		
	mSATA	-		
	CFast	-		
Expansion	CDS Interface	1		
	CFM / CMI Interface	2 / 0		
	PCI / PCIe	-		Optional: 1x PCI or 1x PCIex4
	Mini PCI Express	2		
	M.2	1x M.2 2230 E Key		
	Universal I/O Bracket	-		2
	SIM Socket	1		
	Antenna Holes	4		
	Other	Power Ignition Sensing (IGN) Function		
Power Requirement	Power Input Voltage	AT/ATX, 9-48 VDC		
Physical	Dimension (WxDxH)	420 x 254 x 79 mm		420 x 254 x 98.5 mm
	Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)		
Operating System	Windows	Windows 10		
Environment	Operating Temp.	-20℃ to 60℃		
	Shock	15 Grms, According to IEC60068-2-27		
	Vibration	1.5 Grms, According to IEC60068-2-64		
	Front Panel Protection	IP65 Compliant		
	EMC	CE, FCC Class A		
	Safety	-		

Specifications

	Model Name	CV-W121/P2102			
	Model No.	CV-W121R/P2102-i5 CV-W121R/P2102-i3	CV-W121R/P2102E-i5 CV-W121R/P2102E-i3	CV-W121C/P2102-i5 CV-W121C/P2102-i3	CV-W121C/P2102E-i5 CV-W121C/P2102E-i3
Display	LCD Size	21.5" TFT-LCD			
	Max. Resolution	1920 x 1080			
	Brightness (cd/m2)	300			
	Backlight MTBF	50,000 hrs (LED Backlight)			
Touch	Resistive 5-wire	V		-	
	Projected Capacitive	-		V	
System	Processor	Intel® Core™ i5-8365UE , Intel® Core™ i3-8145UE			
	Chipset	SoC			
	Memory	2x DDR4 , Up to 64GB			
I/O Interface	Video Output	1x VGA , 1x DisplayPort , 1x CDS			
	LAN	2x GbE LAN			
	PoE+	Optional: 2x PoE+			
	Serial Port	4x RS-232/422/485			
	USB	3x USB3.2 , 2x USB2.0			
	Isolated DIO	16x DIO (8x DI, 8x DO)			
	Audio	1x Mic-in , 1x Speaker-out			
	Remote Power On_Off / Reset	1 / 1			
	External FAN Connector	-			
Storage	2.5" HDD/SSD Drive Bay	2			
	mSATA	-			
	CFast	-			
Expansion	CDS Interface	1		1	
	CFM / CMI Interface	2 / 0		2 / 0	
	PCI / PCIe	-	Optional: 1x PCI or 1x PCIex4	-	Optional: 1x PCI or 1x PCIex4
	Mini PCI Express	2		2	
	M.2	1x M.2 2230 E Key		1x M.2 2230 E Key	
	Universal I/O Bracket	-	2	-	2
	SIM Socket	1		1	
	Antenna Holes	4		4	
	Other	Power Ignition Sensing (IGN) Function		Power Ignition Sensing (IGN) Function	
Power Requirement	Power Input Voltage	AT/ATX, 9-48 VDC			
Physical	Dimension (WxDxH)	550 x 330.5 x 76 mm	550 x 330.5 x 95.5 mm	550 x 330.5 x 76 mm	550 x 330.5 x 95.5 mm
	Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)			
Operating System	Windows	Windows 10			
Environment	Operating Temp.	-20℃ to 60℃		-20℃ to 60℃	
	Shock	15 Grms, According to IEC60068-2-27			
	Vibration	1.5 Grms, According to IEC60068-2-64			
	Front Panel Protection	IP65 Compliant			
	EMC	CE, FCC Class A			
	Safety	-			

Specifications

Model Name	CV-W121/P2102	
Model No.	CV-W121G/P2102-i5 CV-W121G/P2102-i3	CV-W121G/P2102E-i5 CV-W121G/P2102E-i3
Display — LCD Size	21.5" TFT-LCD	
Display — Max. Resolution	1920 x 1080	
Display — Brightness (cd/m2)	300	
Display — Backlight MTBF	50,000 hrs (LED Backlight)	
Touch — Resistive 5-wire	-	
Touch — Projected Capacitive	-	
System — Processor	Intel® Core™ i5-8365UE , Intel® Core™ i3-8145UE	
System — Chipset	SoC	
System — Memory	2x DDR4 , Up to 64GB	
I/O Interface — Video Output	1x VGA , 1x DisplayPort , 1x CDS	
I/O Interface — LAN	2x GbE LAN	
I/O Interface — PoE+	Optional: 2x PoE+	
I/O Interface — Serial Port	4x RS-232/422/485	
I/O Interface — USB	3x USB3.2 , 2x USB2.0	
I/O Interface — Isolated DIO	16x DIO (8x DI, 8x DO)	
I/O Interface — Audio	1x Mic-in , 1x Speaker-out	
I/O Interface — Remote Power On_Off / Reset	1 / 1	
I/O Interface — External FAN Connector	-	
Storage — 2.5" HDD/SSD Drive Bay	2	
Storage — mSATA	-	
Storage — CFast	-	
Expansion — CDS Interface	1	
Expansion — CFM / CMI Interface	2 / 0	
Expansion — PCI / PCIe	-	Optional: 1x PCI or 1x PCIex4
Expansion — Mini PCI Express	2	
Expansion — M.2	1x M.2 2230 E Key	
Expansion — Universal I/O Bracket	-	2
Expansion — SIM Socket	1	
Expansion — Antenna Holes	4	
Expansion — Other	Power Ignition Sensing (IGN) Function	
Power Requirement — Power Input Voltage	AT/ATX, 9-48 VDC	
Physical — Dimension (WxDxH)	550 x 330.5 x 76 mm	550 x 330.5 x 95.5 mm
Physical — Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)	
Operating System — Windows	Windows 10	
Environment — Operating Temp.	-20℃ to 60℃	
Environment — Shock	15 Grms, According to IEC60068-2-27	
Environment — Vibration	1.5 Grms, According to IEC60068-2-64	
Environment — Front Panel Protection	IP65 Compliant	
Environment — EMC	CE, FCC Class A	
Environment — Safety	-	

Specifications

Model Name	CV-W124/P2102			
Model No.	CV-W124R/P2102-i5 CV-W124R/P2102-i3	CV-W124R/P2102E-i5 CV-W124R/P2102E-i3	CV-W124C/P2102-i5 CV-W124C/P2102-i3	CV-W124C/P2102E-i5 CV-W124C/P2102E-i3
Display — LCD Size	24" TFT-LCD			
Display — Max. Resolution	1920 x 1080			
Display — Brightness (cd/m2)	300			
Display — Backlight MTBF	50,000 hrs (LED Backlight)			
Touch — Resistive 5-wire	V		-	
Touch — Projected Capacitive	-		V	
System — Processor	Intel® Core™ i5-8365UE , Intel® Core™ i3-8145UE			
System — Chipset	SoC			
System — Memory	2x DDR4 , Up to 64GB			
I/O Interface — Video Output	1x VGA , 1x DisplayPort , 1x CDS			
I/O Interface — LAN	2x GbE LAN			
I/O Interface — PoE+	Optional: 2x PoE+			
I/O Interface — Serial Port	4x RS-232/422/485			
I/O Interface — USB	3x USB3.2 , 2x USB2.0			
I/O Interface — Isolated DIO	16x DIO (8x DI, 8x DO)			
I/O Interface — Audio	1x Mic-in , 1x Speaker-out			
I/O Interface — Remote Power On_Off / Reset	1 / 1			
I/O Interface — External FAN Connector	-			
Storage — 2.5" HDD/SSD Drive Bay	2			
Storage — mSATA	-			
Storage — CFast	-			
Expansion — CDS Interface	1		1	
Expansion — CFM / CMI Interface	2 / 0		2 / 0	
Expansion — PCI / PCIe	-	Optional: 1x PCI or 1x PCIex4	-	Optional: 1x PCI or 1x PCIex4
Expansion — Mini PCI Express	2		2	
Expansion — M.2	1x M.2 2230 E Key		1x M.2 2230 E Key	
Expansion — Universal I/O Bracket	-	2	-	2
Expansion — SIM Socket	1		1	
Expansion — Antenna Holes	4		4	
Expansion — Other	Power Ignition Sensing (IGN) Function		Power Ignition Sensing (IGN) Function	
Power Requirement — Power Input Voltage	AT/ATX, 9-48 VDC			
Physical — Dimension (WxDxH)	605 x 373 x 76 mm	605 x 373 x 95.5 mm	605 x 373 x 76 mm	605 x 373 x 95.5 mm
Physical — Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)			
Operating System — Windows	Windows 10			
Environment — Operating Temp.	-20℃ to 70℃		-30℃ to 70℃	
Environment — Shock	15 Grms, According to IEC60068-2-27			
Environment — Vibration	1.5 Grms, According to IEC60068-2-64			
Environment — Front Panel Protection	IP65 Compliant			
Environment — EMC	CE, FCC Class A			
Environment — Safety	-			

Specifications

Model Name	CV-W124/P2102	
Model No.	CV-W124G/P2102-i5 CV-W124G/P2102-i3	CV-W124G/P2102E-i5 CV-W124G/P2102E-i3
Display LCD Size	24" TFT-LCD	
Max. Resolution	1920 x 1080	
Brightness (cd/m2)	300	
Backlight MTBF	50,000 hrs (LED Backlight)	
Touch Resistive 5-wire	-	
Projected Capacitive	-	
System Processor	Intel® Core™ i5-8365UE , Intel® Core™ i3-8145UE	
Chipset	SoC	
Memory	2x DDR4 , Up to 64GB	
I/O Interface Video Output	1x VGA , 1x DisplayPort , 1x CDS	
LAN	2x GbE LAN	
PoE+	Optional: 2x PoE+	
Serial Port	4x RS-232/422/485	
USB	3x USB3.2 , 2x USB2.0	
Isolated DIO	16x DIO (8x DI, 8x DO)	
Audio	1x Mic-in , 1x Speaker-out	
Remote Power On_Off / Reset	1 / 1	
External FAN Connector	-	
Storage 2.5" HDD/SSD Drive Bay	2	
mSATA	-	
CFast	-	
Expansion CDS Interface	1	
CFM / CMI Interface	2 / 0	
PCI / PCIe	-	Optional: 1x PCI or 1x PCIex4
Mini PCI Express	2	
M.2	1x M.2 2230 E Key	
Universal I/O Bracket	-	2
SIM Socket	1	
Antenna Holes	4	
Other	Power Ignition Sensing (IGN) Function	
Power Requirement Power Input Voltage	AT/ATX, 9-48 VDC	
Physical Dimension (WxDxH)	605 x 373 x 76 mm	605 x 373 x 95.5 mm
Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)	
Operating System Windows	Windows 10	
Environment Operating Temp.	-30℃ to 70℃	
Shock	15 Grms, According to IEC60068-2-27	
Vibration	1.5 Grms, According to IEC60068-2-64	
Front Panel Protection	IP65 Compliant	
EMC	CE, FCC Class A	
Safety	-	

Specifications

Model Name	CV-112H/P2002			
Model No.	CV-112HR/P2002-i5 CV-112HR/P2002-i3	CV-112HR/P2002E-i5 CV-112HR/P2002E-i3	CV-112HR/P2002E-i5-E4 CV-112HR/P2002E-i3-E4	CV-112HR/P2002E-i5-PI CV-112HR/P2002E-i3-PI

Category	Item	Specification			
Display	LCD Size	12.1" TFT-LCD			
	Max. Resolution	1024 x 768			
	Brightness (cd/m2)	500			
	Backlight MTBF	30,000 hrs (LED Backlight)			
Touch	Resistive 5-wire	V			
	Projected Capacitive	-			
System	Processor	Intel® Core™ i5-6300U , Intel® Core™ i3-6100U			
	Chipset	SoC			
	Memory	2x DDR4 , Up to 32GB			
I/O Interface	Video Output	1x VGA , 1x DVI-D , 1x CDS			
	LAN	2x GbE LAN			
	PoE+	Optional: 2x PoE+			
	Serial Port	6x RS-232/422/485			
	USB	4x USB3.0 , 1x USB2.0			
	Isolated DIO	16x DIO (8x DI, 8x DO)			
	Audio	1x Mic-in , 1x Speaker-out			
	Remote Power On_Off / Reset	1 / 1			
	External FAN Connector	1			
Storage	2.5" HDD/SSD Drive Bay	2			
	mSATA	2			
	CFast	1			
Expansion	CDS Interface	1			
	CFM / CMI Interface	2 / 0			
	PCI / PCIe	-	Optional: 1x PCI or 1x PCIex4	1x PCIex4	1x PCI
	Mini PCI Express	2			
	M.2	-			
	Universal I/O Bracket	1			
	SIM Socket	1			
	Antenna Holes	4			
	Other	Power Ignition Sensing (IGN) Function			
Power Requirement	Power Input Voltage	AT/ATX, 9-48 VDC			
Physical	Dimension (WxDxH)	345 x 265.3 x 82 mm	345 x 265.3 x 100 mm		
	Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)			
Operating System	Windows	Windows 10 , Windows 8.1 , Windows 7			
Environment	Operating Temp.	-20℃ to 70℃			
	Shock	15 Grms, According to IEC60068-2-27			
	Vibration	1.5 Grms, According to IEC60068-2-64			
	Front Panel Protection	IP65 Compliant			
	EMC	CE, FCC Class A			
	Safety	-			

Specifications

Model Name	CV-112H/P2002			
Model No.	CV-112HC/P2002-i5 CV-112HC/P2002-i3	CV-112HC/P2002E-i5 CV-112HC/P2002E-i3	CV-112HC/P2002E-i5-E4 CV-112HC/P2002E-i3-E4	CV-112HC/P2002E-i5-PI CV-112HC/P2002E-i3-PI
Display — LCD Size	12.1" TFT-LCD			
Display — Max. Resolution	1024 x 768			
Display — Brightness (cd/m2)	500			
Display — Backlight MTBF	30,000 hrs (LED Backlight)			
Touch — Resistive 5-wire	-			
Touch — Projected Capacitive	V			
System — Processor	Intel® Core™ i5-6300U , Intel® Core™ i3-6100U			
System — Chipset	SoC			
System — Memory	2x DDR4 , Up to 32GB			
I/O Interface — Video Output	1x VGA , 1x DVI-D , 1x CDS			
I/O Interface — LAN	2x GbE LAN			
I/O Interface — PoE+	Optional: 2x PoE+			
I/O Interface — Serial Port	6x RS-232/422/485			
I/O Interface — USB	4x USB3.0 , 1x USB2.0			
I/O Interface — Isolated DIO	16x DIO (8x DI, 8x DO)			
I/O Interface — Audio	1x Mic-in , 1x Speaker-out			
I/O Interface — Remote Power On_Off / Reset	1 / 1			
I/O Interface — External FAN Connector	1			
Storage — 2.5" HDD/SSD Drive Bay	2			
Storage — mSATA	2			
Storage — CFast	1			
Expansion — CDS Interface	1			
Expansion — CFM / CMI Interface	2 / 0			
Expansion — PCI / PCIe	-	Optional: 1x PCI or 1x PCIex4	1x PCIex4	1x PCI
Expansion — Mini PCI Express	2			
Expansion — M.2	-			
Expansion — Universal I/O Bracket	1			
Expansion — SIM Socket	1			
Expansion — Antenna Holes	4			
Expansion — Other	Power Ignition Sensing (IGN) Function			
Power Requirement — Power Input Voltage	AT/ATX, 9-48 VDC			
Physical — Dimension (WxDxH)	345 x 265.3 x 82 mm	345 x 265.3 x 100 mm		
Physical — Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)			
Operating System — Windows	Windows 10 , Windows 8.1 , Windows 7			
Environment — Operating Temp.	-20°C to 70°C			
Environment — Shock	15 Grms, According to IEC60068-2-27			
Environment — Vibration	1.5 Grms, According to IEC60068-2-64			
Environment — Front Panel Protection	IP65 Compliant			
Environment — EMC	CE, FCC Class A			
Environment — Safety	-			

Specifications

Model Name	CV-115/P2002			
Model No.	CV-115R/P2002-i5 CV-115R/P2002-i3	CV-115R/P2002E-i5 CV-115R/P2002E-i3	CV-115R/P2002E-i5-E4 CV-115R/P2002E-i3-E4	CV-115R/P2002E-i5-PI CV-115R/P2002E-i3-PI
Display				
LCD Size	15" TFT-LCD			
Max. Resolution	1024 x 768			
Brightness (cd/m2)	350			
Backlight MTBF	50,000 hrs (LED Backlight)			
Touch				
Resistive 5-wire	V			
Projected Capacitive	-			
System				
Processor	Intel® Core™ i5-6300U , Intel® Core™ i3-6100U			
Chipset	SoC			
Memory	2x DDR4 , Up to 32GB			
I/O Interface				
Video Output	1x VGA , 1x DVI-D , 1x CDS			
LAN	2x GbE LAN			
PoE+	Optional: 2x PoE+			
Serial Port	6x RS-232/422/485			
USB	4x USB3.0 , 1x USB2.0			
Isolated DIO	16x DIO (8x DI, 8x DO)			
Audio	1x Mic-in , 1x Speaker-out			
Remote Power On_Off / Reset	1 / 1			
External FAN Connector	1			
Storage				
2.5" HDD/SSD Drive Bay	2			
mSATA	2			
CFast	1			
Expansion				
CDS Interface	1			
CFM / CMI Interface	2 / 0			
PCI / PCIe	-	Optional: 1x PCI or 1x PCIex4	1x PCIex4	1x PCI
Mini PCI Express	2			
M.2	-			
Universal I/O Bracket	1			
SIM Socket	1			
Antenna Holes	4			
Other	Power Ignition Sensing (IGN) Function			
Power Requirement				
Power Input Voltage	AT/ATX, 9-48 VDC			
Physical				
Dimension (WxDxH)	408 x 312.4 x 84.5 mm	408 x 312.4 x 102.5 mm		
Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)			
Operating System				
Windows	Windows 10 , Windows 8.1 , Windows 7			
Environment				
Operating Temp.	0°C to 65°C			
Shock	15 Grms, According to IEC60068-2-27			
Vibration	1.5 Grms, According to IEC60068-2-64			
Front Panel Protection	IP65 Compliant			
EMC	CE, FCC Class A			
Safety	-			

Specifications

Model Name	CV-115/P2002			
Model No.	CV-115C/P2002-i5 CV-115C/P2002-i3	CV-115C/P2002E-i5 CV-115C/P2002E-i3	CV-115C/P2002E-i5-E4 CV-115C/P2002E-i3-E4	CV-115C/P2002E-i5-PI CV-115C/P2002E-i3-PI
Display LCD Size	15" TFT-LCD			
Max. Resolution	1024 x 768			
Brightness (cd/m2)	350			
Backlight MTBF	50,000 hrs (LED Backlight)			
Touch Resistive 5-wire	-			
Projected Capacitive	V			
System Processor	Intel® Core™ i5-6300U , Intel® Core™ i3-6100U			
Chipset	SoC			
Memory	2x DDR4 , Up to 32GB			
I/O Interface Video Output	1x VGA , 1x DVI-D , 1x CDS			
LAN	2x GbE LAN			
PoE+	Optional: 2x PoE+			
Serial Port	6x RS-232/422/485			
USB	4x USB3.0 , 1x USB2.0			
Isolated DIO	16x DIO (8x DI, 8x DO)			
Audio	1x Mic-in , 1x Speaker-out			
Remote Power On_Off / Reset	1 / 1			
External FAN Connector	1			
Storage 2.5" HDD/SSD Drive Bay	2			
mSATA	2			
CFast	1			
Expansion CDS Interface	1			
CFM / CMI Interface	2 / 0			
PCI / PCIe	-	Optional: 1x PCI or 1x PCIex4	1x PCIex4	1x PCI
Mini PCI Express	2			
M.2	-			
Universal I/O Bracket	1			
SIM Socket	1			
Antenna Holes	4			
Other	Power Ignition Sensing (IGN) Function			
Power Requirement Power Input Voltage	AT/ATX, 9-48 VDC			
Physical Dimension (WxDxH)	408 x 312.4 x 84.5 mm	408 x 312.4 x 102.5 mm		
Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)			
Operating System Windows	Windows 10 , Windows 8.1 , Windows 7			
Environment Operating Temp.	0°C to 65°C			
Shock	15 Grms, According to IEC60068-2-27			
Vibration	1.5 Grms, According to IEC60068-2-64			
Front Panel Protection	IP65 Compliant			
EMC	CE, FCC Class A			
Safety	-			

Specifications

Model Name	CV-117/P2002			
Model No.	CV-117R/P2002-i5 CV-117R/P2002-i3	CV-117R/P2002E-i5 CV-117R/P2002E-i3	CV-117R/P2002E-i5-E4 CV-117R/P2002E-i3-E4	CV-117R/P2002E-i5-Pl CV-117R/P2002E-i3-Pl
Display LCD Size	17" TFT-LCD			
Max. Resolution	1280 x 1024			
Brightness (cd/m2)	350			
Backlight MTBF	50,000 hrs (LED Backlight)			
Touch Resistive 5-wire	V			
Projected Capacitive	-			
System Processor	Intel® Core™ i5-6300U , Intel® Core™ i3-6100U			
Chipset	SoC			
Memory	2x DDR4 , Up to 32GB			
I/O Interface Video Output	1x VGA , 1x DVI-D , 1x CDS			
LAN	2x GbE LAN			
PoE+	Optional: 2x PoE+			
Serial Port	6x RS-232/422/485			
USB	4x USB3.0 , 1x USB2.0			
Isolated DIO	16x DIO (8x DI, 8x DO)			
Audio	1x Mic-in , 1x Speaker-out			
Remote Power On_Off / Reset	1 / 1			
External FAN Connector	1			
Storage 2.5" HDD/SSD Drive Bay	2			
mSATA	2			
CFast	1			
Expansion CDS Interface	1			
CFM / CMI Interface	2 / 0			
PCI / PCIe	-	Optional: 1x PCI or 1x PCIex4	1x PCIex4	1x PCI
Mini PCI Express	2			
M.2	-			
Universal I/O Bracket	1			
SIM Socket	1			
Antenna Holes	4			
Other	Power Ignition Sensing (IGN) Function			
Power Requirement Power Input Voltage	AT/ATX, 9-48 VDC			
Physical Dimension (WxDxH)	450 x 350 x 88.5 mm	450 x 350 x 106.5 mm		
Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)			
Operating System Windows	Windows 10 , Windows 8.1 , Windows 7			
Environment Operating Temp.	-20°C to 70°C			
Shock	15 Grms, According to IEC60068-2-27			
Vibration	1.5 Grms, According to IEC60068-2-64			
Front Panel Protection	IP65 Compliant			
EMC	CE, FCC Class A			
Safety	-			

Specifications

Model Name	CV-117/P2002			
Model No.	CV-117C/P2002-i5 CV-117C/P2002-i3	CV-117C/P2002E-i5 CV-117C/P2002E-i3	CV-117C/P2002E-i5-E4 CV-117C/P2002E-i3-E4	CV-117C/P2002E-i5-PI CV-117C/P2002E-i3-PI
Display LCD Size	17" TFT-LCD			
Max. Resolution	1280 x 1024			
Brightness (cd/m2)	350			
Backlight MTBF	50,000 hrs (LED Backlight)			
Touch Resistive 5-wire	-			
Projected Capacitive	V			
System Processor	Intel® Core™ i5-6300U , Intel® Core™ i3-6100U			
Chipset	SoC			
Memory	2x DDR4 , Up to 32GB			
I/O Interface Video Output	1x VGA , 1x DVI-D , 1x CDS			
LAN	2x GbE LAN			
PoE+	Optional: 2x PoE+			
Serial Port	6x RS-232/422/485			
USB	4x USB3.0 , 1x USB2.0			
Isolated DIO	16x DIO (8x DI, 8x DO)			
Audio	1x Mic-in , 1x Speaker-out			
Remote Power On_Off / Reset	1 / 1			
External FAN Connector	1			
Storage 2.5" HDD/SSD Drive Bay	2			
mSATA	2			
CFast	1			
Expansion CDS Interface	1			
CFM / CMI Interface	2 / 0			
PCI / PCIe	-	Optional: 1x PCI or 1x PCIex4	1x PCIex4	1x PCI
Mini PCI Express	2			
M.2	-			
Universal I/O Bracket	1			
SIM Socket	1			
Antenna Holes	4			
Other	Power Ignition Sensing (IGN) Function			
Power Requirement Power Input Voltage	AT/ATX, 9-48 VDC			
Physical Dimension (WxDxH)	450 x 350 x 88.5 mm	450 x 350 x 106.5 mm		
Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)			
Operating System Windows	Windows 10 , Windows 8.1 , Windows 7			
Environment Operating Temp.	-20℃ to 70℃			
Shock	15 Grms, According to IEC60068-2-27			
Vibration	1.5 Grms, According to IEC60068-2-64			
Front Panel Protection	IP65 Compliant			
EMC	CE, FCC Class A			
Safety	-			

Specifications

Model Name	CV-117/P2002			
Model No.	CV-117G/P2002-i5 CV-117G/P2002-i3	CV-117G/P2002E-i5 CV-117G/P2002E-i3	CV-117G/P2002E-i5-E4 CV-117G/P2002E-i3-E4	CV-117G/P2002E-i5-Pl CV-117G/P2002E-i3-Pl

Display	LCD Size	17" TFT-LCD
	Max. Resolution	1280 x 1024
	Brightness (cd/m2)	350
	Backlight MTBF	50,000 hrs (LED Backlight)
Touch	Resistive 5-wire	-
	Projected Capacitive	-
System	Processor	Intel® Core™ i5-6300U , Intel® Core™ i3-6100U
	Chipset	SoC
	Memory	2x DDR4 , Up to 32GB
I/O Interface	Video Output	1x VGA , 1x DVI-D , 1x CDS
	LAN	2x GbE LAN
	PoE+	Optional: 2x PoE+
	Serial Port	6x RS-232/422/485
	USB	4x USB3.0 , 1x USB2.0
	Isolated DIO	16x DIO (8x DI, 8x DO)
	Audio	1x Mic-in , 1x Speaker-out
	Remote Power On_Off / Reset	1 / 1
	External FAN Connector	1
Storage	2.5" HDD/SSD Drive Bay	2
	mSATA	2
	CFast	1
Expansion	CDS Interface	1
	CFM / CMI Interface	2 / 0
	PCI / PCIe	- Optional: 1x PCI or 1x PCIex4 1x PCIex4 1x PCI
	Mini PCI Express	2
	M.2	-
	Universal I/O Bracket	1
	SIM Socket	1
	Antenna Holes	4
	Other	Power Ignition Sensing (IGN) Function
Power Requirement	Power Input Voltage	AT/ATX, 9-48 VDC
Physical	Dimension (WxDxH)	450 x 350 x 88.5 mm 450 x 350 x 106.5 mm
	Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)
Operating System	Windows	Windows 10 , Windows 8.1 , Windows 7
Environment	Operating Temp.	-25℃ to 70℃
	Shock	15 Grms, According to IEC60068-2-27
	Vibration	1.5 Grms, According to IEC60068-2-64
	Front Panel Protection	IP65 Compliant
	EMC	CE, FCC Class A
	Safety	-

Specifications

Model Name	CV-119/P2002			
Model No.	CV-119R/P2002-i5 CV-119R/P2002-i3	CV-119R/P2002E-i5 CV-119R/P2002E-i3	CV-119R/P2002E-i5-E4 CV-119R/P2002E-i3-E4	CV-119R/P2002E-i5 CV-119R/P2002E-i3
Display LCD Size	19" TFT-LCD			
Max. Resolution	1280 x 1024			
Brightness (cd/m2)	350			
Backlight MTBF	50,000 hrs (LED Backlight)			
Touch Resistive 5-wire	V			
Projected Capacitive	-			
System Processor	Intel® Core™ i5-6300U , Intel® Core™ i3-6100U			
Chipset	SoC			
Memory	2x DDR4 , Up to 32GB			
I/O Interface Video Output	1x VGA , 1x DVI-D , 1x CDS			
LAN	2x GbE LAN			
PoE+	Optional: 2x PoE+			
Serial Port	6x RS-232/422/485			
USB	4x USB3.0 , 1x USB2.0			
Isolated DIO	16x DIO (8x DI, 8x DO)			
Audio	1x Mic-in , 1x Speaker-out			
Remote Power On_Off / Reset	1 / 1			
External FAN Connector	1			
Storage 2.5" HDD/SSD Drive Bay	2			
mSATA	2			
CFast	1			
Expansion CDS Interface	1			
CFM / CMI Interface	2 / 0			
PCI / PCIe	-	Optional: 1x PCI or 1x PCIex4	1x PCIex4	1x PCI
Mini PCI Express	2			
M.2	-			
Universal I/O Bracket	1			
SIM Socket	1			
Antenna Holes	4			
Other	Power Ignition Sensing (IGN) Function			
Power Requirement Power Input Voltage	AT/ATX, 9-48 VDC			
Physical Dimension (WxDxH)	510 x 389.3 x 88.5 mm	510 x 389.3 x 106.5 mm		
Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)			
Operating System Windows	Windows 10 , Windows 8.1 , Windows 7			
Environment Operating Temp.	0°C to 50°C			
Shock	15 Grms, According to IEC60068-2-27			
Vibration	1.5 Grms, According to IEC60068-2-64			
Front Panel Protection	IP65 Compliant			
EMC	CE, FCC Class A			
Safety	-			

Specifications

Model Name	CV-119/P2002			
Model No.	CV-119C/P2002-i5 CV-119C/P2002-i3	CV-119C/P2002E-i5 CV-119C/P2002E-i3	CV-119C/P2002E-i5-E4 CV-119C/P2002E-i3-E4	CV-119C/P2002E-i5-PI CV-119C/P2002E-i3-PI
Display — LCD Size	19" TFT-LCD			
Display — Max. Resolution	1280 x 1024			
Display — Brightness (cd/m2)	350			
Display — Backlight MTBF	50,000 hrs (LED Backlight)			
Touch — Resistive 5-wire	-			
Touch — Projected Capacitive	V			
System — Processor	Intel® Core™ i5-6300U , Intel® Core™ i3-6100U			
System — Chipset	SoC			
System — Memory	2x DDR4 , Up to 32GB			
I/O Interface — Video Output	1x VGA , 1x DVI-D , 1x CDS			
I/O Interface — LAN	2x GbE LAN			
I/O Interface — PoE+	Optional: 2x PoE+			
I/O Interface — Serial Port	6x RS-232/422/485			
I/O Interface — USB	4x USB3.0 , 1x USB2.0			
I/O Interface — Isolated DIO	16x DIO (8x DI, 8x DO)			
I/O Interface — Audio	1x Mic-in , 1x Speaker-out			
I/O Interface — Remote Power On_Off / Reset	1 / 1			
I/O Interface — External FAN Connector	1			
Storage — 2.5" HDD/SSD Drive Bay	2			
Storage — mSATA	2			
Storage — CFast	1			
Expansion — CDS Interface	1			
Expansion — CFM / CMI Interface	2 / 0			
Expansion — PCI / PCIe	-	Optional: 1x PCI or 1x PCIex4	1x PCIex4	1x PCI
Expansion — Mini PCI Express	2			
Expansion — M.2	-			
Expansion — Universal I/O Bracket	1			
Expansion — SIM Socket	1			
Expansion — Antenna Holes	4			
Expansion — Other	Power Ignition Sensing (IGN) Function			
Power Requirement — Power Input Voltage	AT/ATX, 9-48 VDC			
Physical — Dimension (WxDxH)	510 x 389.3 x 88.5 mm	510 x 389.3 x 106.5 mm		
Physical — Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)			
Operating System — Windows	Windows 10 , Windows 8.1 , Windows 7			
Environment — Operating Temp.	0℃ to 50℃			
Environment — Shock	15 Grms, According to IEC60068-2-27			
Environment — Vibration	1.5 Grms, According to IEC60068-2-64			
Environment — Front Panel Protection	IP65 Compliant			
Environment — EMC	CE, FCC Class A			
Environment — Safety	-			

Specifications

Model Name	CV-119/P2002			
Model No.	CV-119G/P2002-i5 CV-119G/P2002-i3	CV-119G/P2002E-i5 CV-119G/P2002E-i3	CV-119G/P2002E-i5-E4 CV-119G/P2002E-i3-E4	CV-119G/P2002E-i5-PI CV-119G/P2002E-i3-PI
Display — LCD Size	19" TFT-LCD			
Max. Resolution	1280 x 1024			
Brightness (cd/m2)	350			
Backlight MTBF	50,000 hrs (LED Backlight)			
Touch — Resistive 5-wire	-			
Projected Capacitive	-			
System — Processor	Intel® Core™ i5-6300U , Intel® Core™ i3-6100U			
Chipset	SoC			
Memory	2x DDR4 , Up to 32GB			
I/O Interface — Video Output	1x VGA , 1x DVI-D , 1x CDS			
LAN	2x GbE LAN			
PoE+	Optional: 2x PoE+			
Serial Port	6x RS-232/422/485			
USB	4x USB3.0 , 1x USB2.0			
Isolated DIO	16x DIO (8x DI, 8x DO)			
Audio	1x Mic-in , 1x Speaker-out			
Remote Power On_Off / Reset	1 / 1			
External FAN Connector	1			
Storage — 2.5" HDD/SSD Drive Bay	2			
mSATA	2			
CFast	1			
Expansion — CDS Interface	1			
CFM / CMI Interface	2 / 0			
PCI / PCIe	-	Optional: 1x PCI or 1x PCIex4	1x PCIex4	1x PCI
Mini PCI Express	2			
M.2	-			
Universal I/O Bracket	1			
SIM Socket	1			
Antenna Holes	4			
Other	Power Ignition Sensing (IGN) Function			
Power Requirement — Power Input Voltage	AT/ATX, 9-48 VDC			
Physical — Dimension (WxDxH)	510 x 389.3 x 88.5 mm	510 x 389.3 x 106.5 mm		
Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)			
Operating System — Windows	Windows 10 , Windows 8.1 , Windows 7			
Environment — Operating Temp.	0°C to 50°C			
Shock	15 Grms, According to IEC60068-2-27			
Vibration	1.5 Grms, According to IEC60068-2-64			
Front Panel Protection	IP65 Compliant			
EMC	CE, FCC Class A			
Safety	-			

Specifications

Model Name	CV-W115/P2002			
Model No.	CV-W115R/P2002-i5 CV-W115R/P2002-i3	CV-W115R/P2002E-i5 CV-W115R/P2002E-i3	CV-W115R/P2002E-i5-E4 CV-W115R/P2002E-i3-E4	CV-W115R/P2002E-i5-Pl CV-W115R/P2002E-i3-Pl
Display — LCD Size	15.6" TFT-LCD			
Display — Max. Resolution	1366 x 768			
Display — Brightness (cd/m2)	400			
Display — Backlight MTBF	50,000 hrs (LED Backlight)			
Touch — Resistive 5-wire	V			
Touch — Projected Capacitive	-			
System — Processor	Intel® Core™ i5-6300U , Intel® Core™ i3-6100U			
System — Chipset	SoC			
System — Memory	2x DDR4 , Up to 32GB			
I/O Interface — Video Output	1x VGA , 1x DVI-D , 1x CDS			
I/O Interface — LAN	2x GbE LAN			
I/O Interface — PoE+	Optional: 2x PoE+			
I/O Interface — Serial Port	6x RS-232/422/485			
I/O Interface — USB	4x USB3.0 , 1x USB2.0			
I/O Interface — Isolated DIO	16x DIO (8x DI, 8x DO)			
I/O Interface — Audio	1x Mic-in , 1x Speaker-out			
I/O Interface — Remote Power On_Off / Reset	1 / 1			
I/O Interface — External FAN Connector	1			
Storage — 2.5" HDD/SSD Drive Bay	2			
Storage — mSATA	2			
Storage — CFast	1			
Expansion — CDS Interface	1			
Expansion — CFM / CMI Interface	2 / 0			
Expansion — PCI / PCIe	-	Optional: 1x PCI or 1x PCIex4	1x PCIex4	1x PCI
Expansion — Mini PCI Express	2			
Expansion — M.2	-			
Expansion — Universal I/O Bracket	1			
Expansion — SIM Socket	1			
Expansion — Antenna Holes	4			
Expansion — Other	Power Ignition Sensing (IGN) Function			
Power Requirement — Power Input Voltage	AT/ATX, 9-48 VDC			
Physical — Dimension (WxDxH)	420 x 254 x 91.5 mm	420 x 254 x 109.5 mm		
Physical — Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)			
Operating System — Windows	Windows 10 , Windows 8.1 , Windows 7			
Environment — Operating Temp.	0°C to 60°C			
Environment — Shock	15 Grms, According to IEC60068-2-27			
Environment — Vibration	1.5 Grms, According to IEC60068-2-64			
Environment — Front Panel Protection	IP65 Compliant			
Environment — EMC	CE, FCC Class A			
Environment — Safety	-			

Specifications

Model Name	CV-W115/P2002			
Model No.	CV-W115C/P2002-i5 CV-W115C/P2002-i3	CV-W115C/P2002E-i5 CV-W115C/P2002E-i3	CV-W115C/P2002E-i5-E4 CV-W115C/P2002E-i3-E4	CV-W115C/P2002E-i5-Pl CV-W115C/P2002E-i3-Pl
Display — LCD Size	15.6" TFT-LCD			
Display — Max. Resolution	1366 x 768			
Display — Brightness (cd/m2)	400			
Display — Backlight MTBF	50,000 hrs (LED Backlight)			
Touch — Resistive 5-wire	-			
Touch — Projected Capacitive	V			
System — Processor	Intel® Core™ i5-6300U , Intel® Core™ i3-6100U			
System — Chipset	SoC			
System — Memory	2x DDR4 , Up to 32GB			
I/O Interface — Video Output	1x VGA , 1x DVI-D , 1x CDS			
I/O Interface — LAN	2x GbE LAN			
I/O Interface — PoE+	Optional: 2x PoE+			
I/O Interface — Serial Port	6x RS-232/422/485			
I/O Interface — USB	4x USB3.0 , 1x USB2.0			
I/O Interface — Isolated DIO	16x DIO (8x DI, 8x DO)			
I/O Interface — Audio	1x Mic-in , 1x Speaker-out			
I/O Interface — Remote Power On_Off / Reset	1 / 1			
I/O Interface — External FAN Connector	1			
Storage — 2.5" HDD/SSD Drive Bay	2			
Storage — mSATA	2			
Storage — CFast	1			
Expansion — CDS Interface	1			
Expansion — CFM / CMI Interface	2 / 0			
Expansion — PCI / PCIe	-	Optional: 1x PCI or 1x PCIex4	1x PCIex4	1x PCI
Expansion — Mini PCI Express	2			
Expansion — M.2	-			
Expansion — Universal I/O Bracket	1			
Expansion — SIM Socket	1			
Expansion — Antenna Holes	4			
Expansion — Other	Power Ignition Sensing (IGN) Function			
Power Requirement — Power Input Voltage	AT/ATX, 9-48 VDC			
Physical — Dimension (WxDxH)	420 x 254 x 91.5 mm	420 x 254 x 109.5 mm		
Physical — Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)			
Operating System — Windows	Windows 10 , Windows 8.1 , Windows 7			
Environment — Operating Temp.	0°C to 60°C			
Environment — Shock	15 Grms, According to IEC60068-2-27			
Environment — Vibration	1.5 Grms, According to IEC60068-2-64			
Environment — Front Panel Protection	IP65 Compliant			
Environment — EMC	CE, FCC Class A			
Environment — Safety	-			

Specifications

Model Name	CV-W121/P2002			
Model No.	CV-W121R/P2002-i5 CV-W121R/P2002-i3	CV-W121R/P2002E-i5 CV-W121R/P2002E-i3	CV-W121R/P2002E-i5-E4 CV-W121R/P2002E-i3-E4	CV-W121R/P2002E-i5-Pl CV-W121R/P2002E-i3-Pl
Display — LCD Size	21.5" TFT-LCD			
Display — Max. Resolution	1920 x 1080			
Display — Brightness (cd/m2)	300			
Display — Backlight MTBF	50,000 hrs (LED Backlight)			
Touch — Resistive 5-wire	V			
Touch — Projected Capacitive	-			
System — Processor	Intel® Core™ i5-6300U , Intel® Core™ i3-6100U			
System — Chipset	SoC			
System — Memory	2x DDR4 , Up to 32GB			
I/O Interface — Video Output	1x VGA , 1x DVI-D , 1x CDS			
I/O Interface — LAN	2x GbE LAN			
I/O Interface — PoE+	Optional: 2x PoE+			
I/O Interface — Serial Port	6x RS-232/422/485			
I/O Interface — USB	4x USB3.0 , 1x USB2.0			
I/O Interface — Isolated DIO	16x DIO (8x DI, 8x DO)			
I/O Interface — Audio	1x Mic-in , 1x Speaker-out			
I/O Interface — Remote Power On_Off / Reset	1 / 1			
I/O Interface — External FAN Connector	1			
Storage — 2.5" HDD/SSD Drive Bay	2			
Storage — mSATA	2			
Storage — CFast	1			
Expansion — CDS Interface	1			
Expansion — CFM / CMI Interface	2 / 0			
Expansion — PCI / PCIe	-	Optional: 1x PCI or 1x PCIex4	1x PCIex4	1x PCI
Expansion — Mini PCI Express	2			
Expansion — M.2	-			
Expansion — Universal I/O Bracket	1			
Expansion — SIM Socket	1			
Expansion — Antenna Holes	4			
Expansion — Other	Power Ignition Sensing (IGN) Function			
Power Requirement — Power Input Voltage	AT/ATX, 9-48 VDC			
Physical — Dimension (WxDxH)	550 x 330.5 x 88.5 mm	550 x 330.5 x 106.5 mm		
Physical — Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)			
Operating System — Windows	Windows 10 , Windows 8.1 , Windows 7			
Environment — Operating Temp.	0°C to 60°C			
Environment — Shock	15 Grms, According to IEC60068-2-27			
Environment — Vibration	1.5 Grms, According to IEC60068-2-64			
Environment — Front Panel Protection	IP65 Compliant			
Environment — EMC	CE, FCC Class A			
Environment — Safety	-			

Specifications

Model Name	CV-W121/P2002			
Model No.	CV-W121C/P2002-i5 CV-W121C/P2002-i3	CV-W121C/P2002E-i5 CV-W121C/P2002E-i3	CV-W121C/P2002E-i5-E4 CV-W121C/P2002E-i3-E4	CV-W121C/P2002E-i5-PI CV-W121C/P2002E-i3-PI

Display	LCD Size	21.5" TFT-LCD
	Max. Resolution	1920 x 1080
	Brightness (cd/m2)	300
	Backlight MTBF	50,000 hrs (LED Backlight)
Touch	Resistive 5-wire	-
	Projected Capacitive	V
System	Processor	Intel® Core™ i5-6300U , Intel® Core™ i3-6100U
	Chipset	SoC
	Memory	2x DDR4 , Up to 32GB
I/O Interface	Video Output	1x VGA , 1x DVI-D , 1x CDS
	LAN	2x GbE LAN
	PoE+	Optional: 2x PoE+
	Serial Port	6x RS-232/422/485
	USB	4x USB3.0 , 1x USB2.0
	Isolated DIO	16x DIO (8x DI, 8x DO)
	Audio	1x Mic-in , 1x Speaker-out
	Remote Power On_Off / Reset	1 / 1
	External FAN Connector	1
Storage	2.5" HDD/SSD Drive Bay	2
	mSATA	2
	CFast	1
Expansion	CDS Interface	1
	CFM / CMI Interface	2 / 0
	PCI / PCIe	- Optional: 1x PCI or 1x PCIex4 1x PCIex4 1x PCI
	Mini PCI Express	2
	M.2	-
	Universal I/O Bracket	1
	SIM Socket	1
	Antenna Holes	4
	Other	Power Ignition Sensing (IGN) Function
Power Requirement	Power Input Voltage	AT/ATX, 9-48 VDC
Physical	Dimension (WxDxH)	550 x 330.5 x 88.5 mm 550 x 330.5 x 106.5 mm
	Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)
Operating System	Windows	Windows 10 , Windows 8.1 , Windows 7
Environment	Operating Temp.	0°C to 60°C
	Shock	15 Grms, According to IEC60068-2-27
	Vibration	1.5 Grms, According to IEC60068-2-64
	Front Panel Protection	IP65 Compliant
	EMC	CE, FCC Class A
	Safety	-

Specifications

Model Name	CV-W121/P2002			
Model No.	CV-W121G/P2002-i5 CV-W121G/P2002-i3	CV-W121G/P2002E-i5 CV-W121G/P2002E-i3	CV-W121G/P2002E-i5-E4 CV-W121G/P2002E-i3-E4	CV-W121G/P2002E-i5-PI CV-W121G/P2002E-i3-PI
Display				
LCD Size	21.5" TFT-LCD			
Max. Resolution	1920 x 1080			
Brightness (cd/m2)	300			
Backlight MTBF	50,000 hrs (LED Backlight)			
Touch				
Resistive 5-wire	-			
Projected Capacitive	-			
System				
Processor	Intel® Core™ i5-6300U , Intel® Core™ i3-6100U			
Chipset	SoC			
Memory	2x DDR4 , Up to 32GB			
I/O Interface				
Video Output	1x VGA , 1x DVI-D , 1x CDS			
LAN	2x GbE LAN			
PoE+	Optional: 2x PoE+			
Serial Port	6x RS-232/422/485			
USB	4x USB3.0 , 1x USB2.0			
Isolated DIO	16x DIO (8x DI, 8x DO)			
Audio	1x Mic-in , 1x Speaker-out			
Remote Power On_Off / Reset	1 / 1			
External FAN Connector	1			
Storage				
2.5" HDD/SSD Drive Bay	2			
mSATA	2			
CFast	1			
Expansion				
CDS Interface	1			
CFM / CMI Interface	2 / 0			
PCI / PCIe	-	Optional: 1x PCI or 1x PCIex4	1x PCIex4	1x PCI
Mini PCI Express	2			
M.2	-			
Universal I/O Bracket	1			
SIM Socket	1			
Antenna Holes	4			
Other	Power Ignition Sensing (IGN) Function			
Power Requirement				
Power Input Voltage	AT/ATX, 9-48 VDC			
Physical				
Dimension (WxDxH)	550 x 330.5 x 88.5 mm	550 x 330.5 x 106.5 mm		
Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)			
Operating System				
Windows	Windows 10 , Windows 8.1 , Windows 7			
Environment				
Operating Temp.	0°C to 60°C			
Shock	15 Grms, According to IEC60068-2-27			
Vibration	1.5 Grms, According to IEC60068-2-64			
Front Panel Protection	IP65 Compliant			
EMC	CE, FCC Class A			
Safety	-			

Specifications

Model Name	CV-W124/P2002			
Model No.	CV-W124R/P2002-i5 CV-W124R/P2002-i3	CV-W124R/P2002E-i5 CV-W124R/P2002E-i3	CV-W124R/P2002E-i5-E4 CV-W124R/P2002E-i3-E4	CV-W124R/P2002E-i5-PI CV-W124R/P2002E-i3-PI
Display — LCD Size	24" TFT-LCD			
Display — Max. Resolution	1920 x 1080			
Display — Brightness (cd/m2)	300			
Display — Backlight MTBF	50,000 hrs (LED Backlight)			
Touch — Resistive 5-wire	V			
Touch — Projected Capacitive	-			
System — Processor	Intel® Core™ i5-6300U , Intel® Core™ i3-6100U			
System — Chipset	SoC			
System — Memory	2x DDR4 , Up to 32GB			
I/O Interface — Video Output	1x VGA , 1x DVI-D , 1x CDS			
I/O Interface — LAN	2x GbE LAN			
I/O Interface — PoE+	Optional: 2x PoE+			
I/O Interface — Serial Port	6x RS-232/422/485			
I/O Interface — USB	4x USB3.0 , 1x USB2.0			
I/O Interface — Isolated DIO	16x DIO (8x DI, 8x DO)			
I/O Interface — Audio	1x Mic-in , 1x Speaker-out			
I/O Interface — Remote Power On_Off / Reset	1 / 1			
I/O Interface — External FAN Connector	1			
Storage — 2.5" HDD/SSD Drive Bay	2			
Storage — mSATA	2			
Storage — CFast	1			
Expansion — CDS Interface	1			
Expansion — CFM / CMI Interface	2 / 0			
Expansion — PCI / PCIe	-	Optional: 1x PCI or 1x PCIex4	1x PCIex4	1x PCI
Expansion — Mini PCI Express	2			
Expansion — M.2	-			
Expansion — Universal I/O Bracket	1			
Expansion — SIM Socket	1			
Expansion — Antenna Holes	4			
Expansion — Other	Power Ignition Sensing (IGN) Function			
Power Requirement — Power Input Voltage	AT/ATX, 9-48 VDC			
Physical — Dimension (WxDxH)	605 x 373 x 88.5 mm	605 x 373 x 106.5 mm		
Physical — Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)			
Operating System — Windows	Windows 10 , Windows 8.1 , Windows 7			
Environment — Operating Temp.	-10°C to 60°C			
Environment — Shock	15 Grms, According to IEC60068-2-27			
Environment — Vibration	1.5 Grms, According to IEC60068-2-64			
Environment — Front Panel Protection	IP65 Compliant			
Environment — EMC	CE, FCC Class A			
Environment — Safety	-			

Specifications

Model Name	CV-W121/P2002			
Model No.	CV-W124C/P2002-i5 CV-W124C/P2002-i3	CV-W124C/P2002E-i5 CV-W124C/P2002E-i3	CV-W124C/P2002E-i5-E4 CV-W124C/P2002E-i3-E4	CV-W124C/P2002E-i5-Pl CV-W124C/P2002E-i3-Pl
Display — LCD Size	24" TFT-LCD			
Display — Max. Resolution	1920 x 1080			
Display — Brightness (cd/m2)	300			
Display — Backlight MTBF	50,000 hrs (LED Backlight)			
Touch — Resistive 5-wire	-			
Touch — Projected Capacitive	V			
System — Processor	Intel® Core™ i5-6300U , Intel® Core™ i3-6100U			
System — Chipset	SoC			
System — Memory	2x DDR4 , Up to 32GB			
I/O Interface — Video Output	1x VGA , 1x DVI-D , 1x CDS			
I/O Interface — LAN	2x GbE LAN			
I/O Interface — PoE+	Optional: 2x PoE+			
I/O Interface — Serial Port	6x RS-232/422/485			
I/O Interface — USB	4x USB3.0 , 1x USB2.0			
I/O Interface — Isolated DIO	16x DIO (8x DI, 8x DO)			
I/O Interface — Audio	1x Mic-in , 1x Speaker-out			
I/O Interface — Remote Power On_Off / Reset	1 / 1			
I/O Interface — External FAN Connector	1			
Storage — 2.5" HDD/SSD Drive Bay	2			
Storage — mSATA	2			
Storage — CFast	1			
Expansion — CDS Interface	1			
Expansion — CFM / CMI Interface	2 / 0			
Expansion — PCI / PCIe	-	Optional: 1x PCI or 1x PCIex4	1x PCIex4	1x PCI
Expansion — Mini PCI Express	2			
Expansion — M.2	-			
Expansion — Universal I/O Bracket	1			
Expansion — SIM Socket	1			
Expansion — Antenna Holes	4			
Expansion — Other	Power Ignition Sensing (IGN) Function			
Power Requirement — Power Input Voltage	AT/ATX, 9-48 VDC			
Physical — Dimension (WxDxH)	605 x 373 x 88.5 mm	605 x 373 x 106.5 mm		
Physical — Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)			
Operating System — Windows	Windows 10 , Windows 8.1 , Windows 7			
Environment — Operating Temp.	-20°C to 70°C			
Environment — Shock	15 Grms, According to IEC60068-2-27			
Environment — Vibration	1.5 Grms, According to IEC60068-2-64			
Environment — Front Panel Protection	IP65 Compliant			
Environment — EMC	CE, FCC Class A			
Environment — Safety	-			

Specifications

Model Name	CV-W124/P2002			
Model No.	CV-W124G/P2002-i5 CV-W124G/P2002-i3	CV-W124G/P2002E-i5 CV-W124G/P2002E-i3	CV-W124G/P2002E-i5-E4 CV-W124G/P2002E-i3-E4	CV-W124G/P2002E-i5-PI CV-W124G/P2002E-i3-PI
Display — LCD Size	24" TFT-LCD			
Display — Max. Resolution	1920 x 1080			
Display — Brightness (cd/m2)	300			
Display — Backlight MTBF	50,000 hrs (LED Backlight)			
Touch — Resistive 5-wire	-			
Touch — Projected Capacitive	-			
System — Processor	Intel® Core™ i5-6300U , Intel® Core™ i3-6100U			
System — Chipset	SoC			
System — Memory	2x DDR4 , Up to 32GB			
I/O Interface — Video Output	1x VGA , 1x DVI-D , 1x CDS			
I/O Interface — LAN	2x GbE LAN			
I/O Interface — PoE+	Optional: 2x PoE+			
I/O Interface — Serial Port	6x RS-232/422/485			
I/O Interface — USB	4x USB3.0 , 1x USB2.0			
I/O Interface — Isolated DIO	16x DIO (8x DI, 8x DO)			
I/O Interface — Audio	1x Mic-in , 1x Speaker-out			
I/O Interface — Remote Power On_Off / Reset	1 / 1			
I/O Interface — External FAN Connector	1			
Storage — 2.5" HDD/SSD Drive Bay	2			
Storage — mSATA	2			
Storage — CFast	1			
Expansion — CDS Interface	1			
Expansion — CFM / CMI Interface	2 / 0			
Expansion — PCI / PCIe	-	Optional: 1x PCI or 1x PCIex4	1x PCIex4	1x PCI
Expansion — Mini PCI Express	2			
Expansion — M.2	-			
Expansion — Universal I/O Bracket	1			
Expansion — SIM Socket	1			
Expansion — Antenna Holes	4			
Expansion — Other	Power Ignition Sensing (IGN) Function			
Power Requirement — Power Input Voltage	AT/ATX, 9-48 VDC			
Physical — Dimension (WxDxH)	605 x 373 x 88.5 mm	605 x 373 x 106.5 mm		
Physical — Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)			
Operating System — Windows	Windows 10 , Windows 8.1 , Windows 7			
Environment — Operating Temp.	-20°C to 70°C			
Environment — Shock	15 Grms, According to IEC60068-2-27			
Environment — Vibration	1.5 Grms, According to IEC60068-2-64			
Environment — Front Panel Protection	IP65 Compliant			
Environment — EMC	CE, FCC Class A			
Environment — Safety	-			

CV-100 / P1000 series
Power Efficient Modular Panel PC

- 8.4" to 24" TFT-LCD with 5-wire Resistive, P-Cap Touch or Glass Only
  (Available on Selected Models)
- Onboard Intel® Atom® / Pentium® SoC
- Rugged Aluminum Die-cast Front Bezel with IP65 Front Panel Protection
- 2x GbE LAN, 4x USB, 2x COM, 8x Isolated DIO
- 1x Mini-PCIe Socket for Wireless and I/O Expansion

The Cincoze industrial panel PC includes all-in-one devices that integrate a high-resolution screen, a touch screen and a computer. A wide selection of display sizes are available from 8.4" to 24" with aspect ratio of 4:3 and 16:9, and selected computer performance.

Power Efficient

CV-100/P1000 series is based on an Intel® Atom®/Pentium® processor and supports three independent displays (via VGA and DisplayPort outputs).
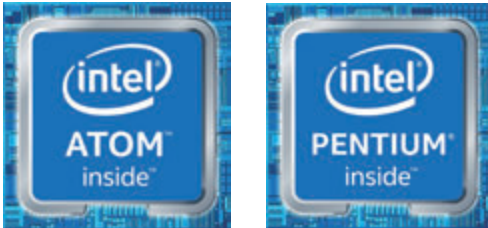
Modular Panel PC

CV-100/P1000 series is a fully configurable modular panel PC designed with Cincoze's patented CDS technology.

All-In-One Design

CV-100/P1000 series is an all-in-one panel PC featuring rich I/Os and Mini-PCIe expansion slot to build a powerful and integrated solution for visualization tasks.

Specifications

Model Name	CV-108/P1101		CV-110/P1101	
Model No.	CV-108R/P1101-E50 CV-108R/P1101-N42	CV-108C/P1101-E50 CV-108C/P1101-N42	CV-110R/P1101-E50 CV-110R/P1101-N42	CV-110C/P1101-E50 CV-110C/P1101-N42
Display LCD Size	8.4" TFT-LCD		10.4" TFT-LCD	
Max. Resolution	800 x 600		800 x 600	
Brightness (cd/m2)	400		400	
Backlight MTBF	30,000 hrs (LED Backlight)		70,000 hrs (LED Backlight)	
Touch Resistive 5-wire	V	-	V	-
Projected Capacitive	-	V	-	V
System Processor	Intel® Atom® x7-E3950 , Intel® Pentium® N4200			
Chipset	SoC			
Memory	1x DDR3L, Up to 8GB			
I/O Interface Video Output	1x VGA , 1x DisplayPort , 1x CDS			
LAN	2x GbE LAN			
PoE+	Optional: 2x PoE+			
Serial Port	4x RS-232/422/485			
USB	4x USB3.0			
Isolated DIO	8x DIO (4x DI, 4x DO)			
Audio	1x Mic-in , 1x Speaker-out			
Remote Power On_Off / Reset	1 / 1			
External FAN Connector	-			
Storage 2.5" HDD/SSD Drive Bay	1			
mSATA	1			
CFast	-			
Expansion CDS Interface	1			
CFM / CMI Interface	2 / 0			
PCI / PCIe	-			
Mini PCI Express	2			
M.2	-			
Universal I/O Bracket	-			
SIM Socket	1			
Antenna Holes	4			
Other	Power Ignition Sensing (IGN) Function			
Power Requirement Power Input Voltage	AT/ATX, 9-48 VDC			
Physical Dimension (WxDxH)	262 x 186.2 x 69.35 mm		295 x 227.3 x 69.35 mm	
Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)			
Operating System Windows	Windows 10			
Environment Operating Temp.	-20°C to 70°C	-20°C to 70°C	-20°C to 70°C	-10°C to 70°C
Shock	15 Grms, According to IEC60068-2-27			
Vibration	1.5 Grms, According to IEC60068-2-64			
Front Panel Protection	IP65 Compliant			
EMC	CE, FCC Class A			
Safety	-			

Specifications

Model Name	CV-110H/P1101	
Model No.	CV-110HR/P1101-E50 CV-110HR/P1101-N42	CV-110HC/P1101-E50 CV-110HC/P1101-N42
Display — LCD Size	10.4" TFT-LCD	
Display — Max. Resolution	1024 x 768	
Display — Brightness (cd/m2)	400	
Display — Backlight MTBF	50,000 hrs (LED Backlight)	
Touch — Resistive 5-wire	V	-
Touch — Projected Capacitive	-	V
System — Processor	Intel® Atom® x7-E3950 , Intel® Pentium® N4200	
System — Chipset	SoC	
System — Memory	1x DDR3L, Up to 8GB	
I/O Interface — Video Output	1x VGA , 1x DisplayPort , 1x CDS	
I/O Interface — LAN	2x GbE LAN	
I/O Interface — PoE+	Optional: 2x PoE+	
I/O Interface — Serial Port	4x RS-232/422/485	
I/O Interface — USB	4x USB3.0	
I/O Interface — Isolated DIO	8x DIO (4x DI, 4x DO)	
I/O Interface — Audio	1x Mic-in , 1x Speaker-out	
I/O Interface — Remote Power On_Off / Reset	1 / 1	
I/O Interface — External FAN Connector	-	
Storage — 2.5" HDD/SSD Drive Bay	1	
Storage — mSATA	1	
Storage — CFast	-	
Expansion — CDS Interface	1	
Expansion — CFM / CMI Interface	2 / 0	
Expansion — PCI / PCIe	-	
Expansion — Mini PCI Express	2	
Expansion — M.2	-	
Expansion — Universal I/O Bracket	-	
Expansion — SIM Socket	1	
Expansion — Antenna Holes	4	
Expansion — Other	Power Ignition Sensing (IGN) Function	
Power Requirement — Power Input Voltage	AT/ATX, 9-48 VDC	
Physical — Dimension (WxDxH)	295 x 227.3 x 69.35 mm	
Physical — Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)	
Operating System — Windows	Windows 10	
Environment — Operating Temp.	-20°C to 70°C	-10°C to 70°C
Environment — Shock	15 Grms, According to IEC60068-2-27	
Environment — Vibration	1.5 Grms, According to IEC60068-2-64	
Environment — Front Panel Protection	IP65 Compliant	
Environment — EMC	CE, FCC Class A	
Environment — Safety	-	

Specifications

Model Name	CV-112H/P1101		CV-115/P1101	
Model No.	CV-112HR/P1101-E50 CV-112HR/P1101-N42	CV-112HC/P1101-E50 CV-112HC/P1101-N42	CV-115R/P1101-E50 CV-115R/P1101-N42	CV-115C/P1101-E50 CV-115C/P1101-N42
Display — LCD Size	12.1" TFT-LCD		15" TFT-LCD	
Max. Resolution	1024 x 768		1024 x 768	
Brightness (cd/m2)	500		350	
Backlight MTBF	30,000 hrs (LED Backlight)		50,000 hrs (LED Backlight)	
Touch — Resistive 5-wire	V	-	V	-
Projected Capacitive	-	V	-	V
System — Processor	Intel® Atom® x7-E3950 , Intel® Pentium® N4200			
Chipset	SoC			
Memory	1x DDR3L, Up to 8GB			
I/O Interface — Video Output	1x VGA , 1x DisplayPort , 1x CDS			
LAN	2x GbE LAN			
PoE+	Optional: 2x PoE+			
Serial Port	4x RS-232/422/485			
USB	4x USB3.0			
Isolated DIO	8x DIO (4x DI, 4x DO)			
Audio	1x Mic-in , 1x Speaker-out			
Remote Power On_Off / Reset	1 / 1			
External FAN Connector	-			
Storage — 2.5" HDD/SSD Drive Bay	1			
mSATA	1			
CFast	-			
Expansion — CDS Interface	1			
CFM / CMI Interface	2 / 0			
PCI / PCIe	-			
Mini PCI Express	2			
M.2	-			
Universal I/O Bracket	-			
SIM Socket	1			
Antenna Holes	4			
Other	Power Ignition Sensing (IGN) Function			
Power Requirement — Power Input Voltage	AT/ATX, 9-48 VDC			
Physical — Dimension (WxDxH)	345 x 265.3 x 69.85 mm		408 x 312.4 x 72.35 mm	
Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)			
Operating System — Windows	Windows 10			
Environment — Operating Temp.	-20°C to 70°C	-20°C to 70°C	0°C to 65°C	0°C to 65°C
Shock	15 Grms, According to IEC60068-2-27			
Vibration	1.5 Grms, According to IEC60068-2-64			
Front Panel Protection	IP65 Compliant			
EMC	CE, FCC Class A			
Safety	-			

Specifications

Model Name	CV-117/P1101		
Model No.	CV-117R/P1101-E50 CV-117R/P1101-N42	CV-117C/P1101-E50 CV-117C/P1101-N42	CV-117G/P1101-E50 CV-117G/P1101-N42
Display LCD Size	17" TFT-LCD		
Max. Resolution	1280 x 1024		
Brightness (cd/m2)	350		
Backlight MTBF	50,000 hrs (LED Backlight)		
Touch Resistive 5-wire	V	-	-
Projected Capacitive	-	V	-
System Processor	Intel® Atom® x7-E3950 , Intel® Pentium® N4200		
Chipset	SoC		
Memory	1x DDR3L, Up to 8GB		
I/O Interface Video Output	1x VGA , 1x DisplayPort , 1x CDS		
LAN	2x GbE LAN		
PoE+	Optional: 2x PoE+		
Serial Port	4x RS-232/422/485		
USB	4x USB3.0		
Isolated DIO	8x DIO (4x DI, 4x DO)		
Audio	1x Mic-in , 1x Speaker-out		
Remote Power On_Off / Reset	1 / 1		
External FAN Connector	-		
Storage 2.5" HDD/SSD Drive Bay	1		
mSATA	1		
CFast	-		
Expansion CDS Interface	1		
CFM / CMI Interface	2 / 0		
PCI / PCIe	-		
Mini PCI Express	2		
M.2	-		
Universal I/O Bracket	-		
SIM Socket	1		
Antenna Holes	4		
Other	Power Ignition Sensing (IGN) Function		
Power Requirement Power Input Voltage	AT/ATX, 9-48 VDC		
Physical Dimension (WxDxH)	450 x 350 x 76.35 mm		
Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)		
Operating System Windows	Windows 10		
Environment Operating Temp.	-20℃ to 70℃	-20℃ to 70℃	-30℃ to 70℃
Shock	15 Grms, According to IEC60068-2-27		
Vibration	1.5 Grms, According to IEC60068-2-64		
Front Panel Protection	IP65 Compliant		
EMC	CE, FCC Class A		
Safety	-		

Specifications

Model Name	CV-119/P1101		
Model No.	CV-119R/P1101-E50 CV-119R/P1101-N42	CV-119C/P1101-E50 CV-119C/P1101-N42	CV-119G/P1101-E50 CV-119G/P1101-N42
Display LCD Size	19" TFT-LCD		
Max. Resolution	1280 x 1024		
Brightness (cd/m2)	350		
Backlight MTBF	50,000 hrs (LED Backlight)		
Touch Resistive 5-wire	V	-	-
Projected Capacitive	-	V	-
System Processor	Intel® Atom® x7-E3950 , Intel® Pentium® N4200		
Chipset	SoC		
Memory	1x DDR3L, Up to 8GB		
I/O Interface Video Output	1x VGA , 1x DisplayPort , 1x CDS		
LAN	2x GbE LAN		
PoE+	Optional: 2x PoE+		
Serial Port	4x RS-232/422/485		
USB	4x USB3.0		
Isolated DIO	8x DIO (4x DI, 4x DO)		
Audio	1x Mic-in , 1x Speaker-out		
Remote Power On_Off / Reset	1 / 1		
External FAN Connector	-		
Storage 2.5" HDD/SSD Drive Bay	1		
mSATA	1		
CFast	-		
Expansion CDS Interface	1		
CFM / CMI Interface	2 / 0		
PCI / PCIe	-		
Mini PCI Express	2		
M.2	-		
Universal I/O Bracket	-		
SIM Socket	1		
Antenna Holes	4		
Other	Power Ignition Sensing (IGN) Function		
Power Requirement Power Input Voltage	AT/ATX, 9-48 VDC		
Physical Dimension (WxDxH)	510 x 389.3 x 76.35 mm		
Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)		
Operating System Windows	Windows 10		
Environment Operating Temp.	0℃ to 50℃	0℃ to 50℃	0℃ to 50℃
Shock	15 Grms, According to IEC60068-2-27		
Vibration	1.5 Grms, According to IEC60068-2-64		
Front Panel Protection	IP65 Compliant		
EMC	CE, FCC Class A		
Safety	-		

Specifications

Model Name	CV-W115/P1101	
Model No.	CV-W115R/P1101-E50 CV-W115R/P1101-N42	CV-W115C/P1101-E50 CV-W115C/P1101-N42
Display		
LCD Size	15.6" TFT-LCD	
Max. Resolution	1366 x 768	
Brightness (cd/m2)	400	
Backlight MTBF	50,000 hrs (LED Backlight)	
Touch		
Resistive 5-wire	V	-
Projected Capacitive	-	V
System		
Processor	Intel® Atom® x7-E3950 , Intel® Pentium® N4200	
Chipset	SoC	
Memory	1x DDR3L, Up to 8GB	
I/O Interface		
Video Output	1x VGA , 1x DisplayPort , 1x CDS	
LAN	2x GbE LAN	
PoE+	Optional: 2x PoE+	
Serial Port	4x RS-232/422/485	
USB	4x USB3.0	
Isolated DIO	8x DIO (4x DI, 4x DO)	
Audio	1x Mic-in , 1x Speaker-out	
Remote Power On_Off / Reset	1 / 1	
External FAN Connector	-	
Storage		
2.5" HDD/SSD Drive Bay	1	
mSATA	1	
CFast	-	
Expansion		
CDS Interface	1	
CFM / CMI Interface	2 / 0	
PCI / PCIe	-	
Mini PCI Express	2	
M.2	-	
Universal I/O Bracket	-	
SIM Socket	1	
Antenna Holes	4	
Other	Power Ignition Sensing (IGN) Function	
Power Requirement		
Power Input Voltage	AT/ATX, 9-48 VDC	
Physical		
Dimension (WxDxH)	420 x 254 x 79.35 mm	
Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)	
Operating System		
Windows	Windows 10	
Environment		
Operating Temp.	0℃ to 60℃	0℃ to 60℃
Shock	15 Grms, According to IEC60068-2-27	
Vibration	1.5 Grms, According to IEC60068-2-64	
Front Panel Protection	IP65 Compliant	
EMC	CE, FCC Class A	
Safety	-	

Specifications

Model Name	CV-W121/P1101		
Model No.	CV-W121R/P1101-E50 CV-W121/P1101-N42	CV-W121C/P1101-E50 CV-W121C/P1101-N42	CV-W121G/P1101-E50 CV-W121G/P1101-N42
Display LCD Size	21.5" TFT-LCD		
Max. Resolution	1920 x 1080		
Brightness (cd/m2)	300		
Backlight MTBF	50,000 hrs (LED Backlight)		
Touch Resistive 5-wire	V	-	-
Projected Capacitive	-	V	-
System Processor	Intel® Atom® x7-E3950 , Intel® Pentium® N4200		
Chipset	SoC		
Memory	1x DDR3L, Up to 8GB		
I/O Interface Video Output	1x VGA , 1x DisplayPort , 1x CDS		
LAN	2x GbE LAN		
PoE+	Optional: 2x PoE+		
Serial Port	4x RS-232/422/485		
USB	4x USB3.0		
Isolated DIO	8x DIO (4x DI, 4x DO)		
Audio	1x Mic-in , 1x Speaker-out		
Remote Power On_Off / Reset	1 / 1		
External FAN Connector	-		
Storage 2.5" HDD/SSD Drive Bay	1		
mSATA	1		
CFast	-		
Expansion CDS Interface	1		
CFM / CMI Interface	2 / 0		
PCI / PCIe	-		
Mini PCI Express	2		
M.2	-		
Universal I/O Bracket	-		
SIM Socket	1		
Antenna Holes	4		
Other	Power Ignition Sensing (IGN) Function		
Power Requirement Power Input Voltage	AT/ATX, 9-48 VDC		
Physical Dimension (WxDxH)	550 x 330.5 x 76.35 mm		
Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)		
Operating System Windows	Windows 10		
Environment Operating Temp.	0℃ to 60℃	0℃ to 60℃	0℃ to 60℃
Shock	15 Grms, According to IEC60068-2-27		
Vibration	1.5 Grms, According to IEC60068-2-64		
Front Panel Protection	IP65 Compliant		
EMC	CE, FCC Class A		
Safety	-		

Specifications

Model Name	CV-W124/P1101		
Model No.	CV-W124R/P1101-E50 CV-W124R/P1101-N42	CV-W124C/P1101-E50 CV-W124C/P1101-N42	CV-W124G/P1101-E50 CV-W124G/P1101-N42
Display — LCD Size	24" TFT-LCD		
Display — Max. Resolution	1920 x 1080		
Display — Brightness (cd/m2)	300		
Display — Backlight MTBF	50,000 hrs (LED Backlight)		
Touch — Resistive 5-wire	V	-	-
Touch — Projected Capacitive	-	V	-
System — Processor	Intel® Atom® x7-E3950 , Intel® Pentium® N4200		
System — Chipset	SoC		
System — Memory	1x DDR3L, Up to 8GB		
I/O Interface — Video Output	1x VGA , 1x DisplayPort , 1x CDS		
I/O Interface — LAN	2x GbE LAN		
I/O Interface — PoE+	Optional: 2x PoE+		
I/O Interface — Serial Port	4x RS-232/422/485		
I/O Interface — USB	4x USB3.0		
I/O Interface — Isolated DIO	8x DIO (4x DI, 4x DO)		
I/O Interface — Audio	1x Mic-in , 1x Speaker-out		
I/O Interface — Remote Power On_Off / Reset	1 / 1		
I/O Interface — External FAN Connector	-		
Storage — 2.5" HDD/SSD Drive Bay	1		
Storage — mSATA	1		
Storage — CFast	-		
Expansion — CDS Interface	1		
Expansion — CFM / CMI Interface	2 / 0		
Expansion — PCI / PCIe	-		
Expansion — Mini PCI Express	2		
Expansion — M.2	-		
Expansion — Universal I/O Bracket	-		
Expansion — SIM Socket	1		
Expansion — Antenna Holes	4		
Expansion — Other	Power Ignition Sensing (IGN) Function		
Power Requirement — Power Input Voltage	AT/ATX, 9-48 VDC		
Physical — Dimension (WxDxH)	605 x 373 x 76 mm		
Physical — Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)		
Operating System — Windows	Windows 10		
Environment — Operating Temp.	-10℃ to 60℃	-20℃ to 70℃	-20℃ to 70℃
Environment — Shock	15 Grms, According to IEC60068-2-27		
Environment — Vibration	1.5 Grms, According to IEC60068-2-64		
Environment — Front Panel Protection	IP65 Compliant		
Environment — EMC	CE, FCC Class A		
Environment — Safety	-		

Specifications

Model Name	CV-108/P1001			
Model No.	CV-108R/P1001	CV-108R/P1001E	CV-108C/P1001	CV-108C/P1001E
Display — LCD Size	8.4" TFT-LCD			
Display — Max. Resolution	800 x 600			
Display — Brightness (cd/m2)	400			
Display — Backlight MTBF	30,000 hrs (LED Backlight)			
Touch — Resistive 5-wire	V		-	
Touch — Projected Capacitive	-		V	
System — Processor	Intel® Atom™ E3845			
System — Chipset	SoC			
System — Memory	1x DDR3L, Up to 8GB			
I/O Interface — Video Output	1x VGA , 1x DisplayPort , 1x CDS			
I/O Interface — LAN	2x GbE LAN			
I/O Interface — PoE+	-			
I/O Interface — Serial Port	2x RS-232/422/485			
I/O Interface — USB	1x USB3.0 , 3x USB2.0			
I/O Interface — Isolated DIO	8x DIO (4x DI, 4x DO)			
I/O Interface — Audio	1x Mic-in , 1x Speaker-out			
I/O Interface — Remote Power On_Off / Reset	1 / 1			
I/O Interface — External FAN Connector	-			
Storage — 2.5" HDD/SSD Drive Bay	1			
Storage — mSATA	-			
Storage — CFast	1			
Expansion — CDS Interface	1		1	
Expansion — CFM / CMI Interface	0 / 0		0 / 0	
Expansion — PCI / PCIe	-		-	
Expansion — Mini PCI Express	1		1	
Expansion — M.2	-		-	
Expansion — Universal I/O Bracket	-	2	-	2
Expansion — SIM Socket	1		1	
Expansion — Antenna Holes	2		2	
Expansion — Other	-		-	
Power Requirement — Power Input Voltage	AT/ATX, 9-48 VDC			
Physical — Dimension (WxDxH)	262 x 186.2 x 65 mm	262 x 186.2 x 87.85 mm	262 x 186.2 x 65 mm	262 x 186.2 x 87.85 mm
Physical — Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)			
Operating System — Windows	Windows 10 , Windows 8.1 , Windows 7			
Environment — Operating Temp.	-20℃ to 70℃		-20℃ to 70℃	
Environment — Shock	15 Grms, According to IEC60068-2-27			
Environment — Vibration	1.5 Grms, According to IEC60068-2-64			
Environment — Front Panel Protection	IP65 Compliant			
Environment — EMC	CE, FCC Class A			
Environment — Safety	-			

Specifications

Model Name	CV-110/P1001			
Model No.	CV-110R/P1001	CV-110R/P1001E	CV-110C/P1001	CV-110C/P1001E
Display — LCD Size	10.4" TFT-LCD			
Max. Resolution	800 x 600			
Brightness (cd/m2)	400			
Backlight MTBF	70,000 hrs (LED Backlight)			
Touch — Resistive 5-wire	V		-	
Projected Capacitive	-		V	
System — Processor	Intel® Atom™ E3845			
Chipset	SoC			
Memory	1x DDR3L, Up to 8GB			
I/O Interface — Video Output	1x VGA , 1x DisplayPort , 1x CDS			
LAN	2x GbE LAN			
PoE+	-			
Serial Port	2x RS-232/422/485			
USB	1x USB3.0 , 3x USB2.0			
Isolated DIO	8x DIO (4x DI, 4x DO)			
Audio	1x Mic-in , 1x Speaker-out			
Remote Power On_Off / Reset	1 / 1			
External FAN Connector	-			
Storage — 2.5" HDD/SSD Drive Bay	1			
mSATA	-			
CFast	1			
Expansion — CDS Interface	1		1	
CFM / CMI Interface	0 / 0		0 / 0	
PCI / PCIe	-		-	
Mini PCI Express	1		1	
M.2	-		-	
Universal I/O Bracket	-	2	-	2
SIM Socket	1		1	
Antenna Holes	2		2	
Other	-		-	
Power Requirement — Power Input Voltage	AT/ATX, 9-48 VDC			
Physical — Dimension (WxDxH)	295 x 227.3 x 65 mm	295 x 227.3 x 87.85 mm	295 x 227.3 x 65 mm	295 x 227.3 x 87.85 mm
Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)			
Operating System — Windows	Windows 10 , Windows 8.1 , Windows 7			
Environment — Operating Temp.	-20℃ to 70℃		-10℃ to 70℃	
Shock	15 Grms, According to IEC60068-2-27			
Vibration	1.5 Grms, According to IEC60068-2-64			
Front Panel Protection	IP65 Compliant			
EMC	CE, FCC Class A			
Safety	-			

Specifications

Model Name	CV-110H/P1001	
Model No.	CV-110HR/P1001	CV-110HR/P1001E
Display — LCD Size	10.4" TFT-LCD	
Max. Resolution	1024 x 768	
Brightness (cd/m2)	400	
Backlight MTBF	50,000 hrs (LED Backlight)	
Touch — Resistive 5-wire	V	
Projected Capacitive	-	
System — Processor	Intel® Atom™ E3845	
Chipset	SoC	
Memory	1x DDR3L, Up to 8GB	
I/O Interface — Video Output	1x VGA , 1x DisplayPort , 1x CDS	
LAN	2x GbE LAN	
PoE+	-	
Serial Port	2x RS-232/422/485	
USB	1x USB3.0 , 3x USB2.0	
Isolated DIO	8x DIO (4x DI, 4x DO)	
Audio	1x Mic-in , 1x Speaker-out	
Remote Power On_Off / Reset	1 / 1	
External FAN Connector	-	
Storage — 2.5" HDD/SSD Drive Bay	1	
mSATA	-	
CFast	1	
Expansion — CDS Interface	1	
CFM / CMI Interface	0 / 0	
PCI / PCIe	-	
Mini PCI Express	1	
M.2	-	
Universal I/O Bracket	-	2
SIM Socket	1	
Antenna Holes	2	
Other	-	
Power Requirement — Power Input Voltage	AT/ATX, 9-48 VDC	
Physical — Dimension (WxDxH)	295 x 227.3 x 65 mm	295 x 227.3 x 87.85 mm
Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)	
Operating System — Windows	Windows 10 , Windows 8.1 , Windows 7	
Environment — Operating Temp.	-20°C to 70°C	
Shock	15 Grms, According to IEC60068-2-27	
Vibration	1.5 Grms, According to IEC60068-2-64	
Front Panel Protection	IP65 Compliant	
EMC	CE, FCC Class A	
Safety	-	

Specifications

Model Name	CV-110H/P1001	
Model No.	CV-110HC/P1001	CV-110HC/P1001E
Display LCD Size	10.4" TFT-LCD	
Max. Resolution	1024 x 768	
Brightness (cd/m2)	400	
Backlight MTBF	50,000 hrs (LED Backlight)	
Touch Resistive 5-wire	-	
Projected Capacitive	V	
System Processor	Intel® Atom™ E3845	
Chipset	SoC	
Memory	1x DDR3L, Up to 8GB	
I/O Interface Video Output	1x VGA , 1x DisplayPort , 1x CDS	
LAN	2x GbE LAN	
PoE+	-	
Serial Port	2x RS-232/422/485	
USB	1x USB3.0 , 3x USB2.0	
Isolated DIO	8x DIO (4x DI, 4x DO)	
Audio	1x Mic-in , 1x Speaker-out	
Remote Power On_Off / Reset	1 / 1	
External FAN Connector	-	
Storage 2.5" HDD/SSD Drive Bay	1	
mSATA	-	
CFast	1	
Expansion CDS Interface	1	
CFM / CMI Interface	0 / 0	
PCI / PCIe	-	
Mini PCI Express	1	
M.2	-	
Universal I/O Bracket	-	2
SIM Socket	1	
Antenna Holes	2	
Other	-	
Power Requirement Power Input Voltage	AT/ATX, 9-48 VDC	
Physical Dimension (WxDxH)	295 x 227.3 x 65 mm	295 x 227.3 x 87.85 mm
Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)	
Operating System Windows	Windows 10 , Windows 8.1 , Windows 7	
Environment Operating Temp.	-10°C to 70°C	
Shock	15 Grms, According to IEC60068-2-27	
Vibration	1.5 Grms, According to IEC60068-2-64	
Front Panel Protection	IP65 Compliant	
EMC	CE, FCC Class A	
Safety	-	

Specifications

Model Name	CV-112H/P1001			
Model No.	CV-112HR/P1001	CV-112HR/P1001E	CV-112HC/P1001	CV-112HC/P1001E
Display LCD Size	12.1" TFT-LCD			
Max. Resolution	1024 x 768			
Brightness (cd/m2)	500			
Backlight MTBF	30,000 hrs (LED Backlight)			
Touch Resistive 5-wire	V		-	
Projected Capacitive	-		V	
System Processor	Intel® Atom™ E3845			
Chipset	SoC			
Memory	1x DDR3L, Up to 8GB			
I/O Interface Video Output	1x VGA , 1x DisplayPort , 1x CDS			
LAN	2x GbE LAN			
PoE+	-			
Serial Port	2x RS-232/422/485			
USB	1x USB3.0 , 3x USB2.0			
Isolated DIO	8x DIO (4x DI, 4x DO)			
Audio	1x Mic-in , 1x Speaker-out			
Remote Power On_Off / Reset	1 / 1			
External FAN Connector	-			
Storage 2.5" HDD/SSD Drive Bay	1			
mSATA	-			
CFast	1			
Expansion CDS Interface	1		1	
CFM / CMI Interface	0 / 0		0 / 0	
PCI / PCIe	-		-	
Mini PCI Express	1		1	
M.2	-		-	
Universal I/O Bracket	-	2	-	2
SIM Socket	1		1	
Antenna Holes	2		2	
Other	-		-	
Power Requirement Power Input Voltage	AT/ATX, 9-48 VDC			
Physical Dimension (WxDxH)	345 x 265.3 x 65.5 mm	345 x 265.3 x 88.35 mm	345 x 265.3 x 65.5 mm	345 x 265.3 x 88.35 mm
Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)			
Operating System Windows	Windows 10 , Windows 8.1 , Windows 7			
Environment Operating Temp.	-20℃ to 70℃		-20℃ to 70℃	
Shock	15 Grms, According to IEC60068-2-27			
Vibration	1.5 Grms, According to IEC60068-2-64			
Front Panel Protection	IP65 Compliant			
EMC	CE, FCC Class A			
Safety	-			

Specifications

Model Name	CV-115/P1001			
Model No.	CV-115R/P1001	CV-115R/P1001E	CV-115C/P1001	CV-115C/P1001E
Display				
LCD Size	15" TFT-LCD			
Max. Resolution	1024 x 768			
Brightness (cd/m2)	350			
Backlight MTBF	50,000 hrs (LED Backlight)			
Touch				
Resistive 5-wire	V		-	
Projected Capacitive	-		V	
System				
Processor	Intel® Atom™ E3845			
Chipset	SoC			
Memory	1x DDR3L, Up to 8GB			
I/O Interface				
Video Output	1x VGA , 1x DisplayPort , 1x CDS			
LAN	2x GbE LAN			
PoE+	-			
Serial Port	2x RS-232/422/485			
USB	1x USB3.0 , 3x USB2.0			
Isolated DIO	8x DIO (4x DI, 4x DO)			
Audio	1x Mic-in , 1x Speaker-out			
Remote Power On_Off / Reset	1 / 1			
External FAN Connector	-			
Storage				
2.5" HDD/SSD Drive Bay	1			
mSATA	-			
CFast	1			
Expansion				
CDS Interface	1		1	
CFM / CMI Interface	0 / 0		0 / 0	
PCI / PCIe	-		-	
Mini PCI Express	1		1	
M.2	-		-	
Universal I/O Bracket	-	2	-	2
SIM Socket	1		1	
Antenna Holes	2		2	
Other	-		-	
Power Requirement				
Power Input Voltage	AT/ATX, 9-48 VDC			
Physical				
Dimension (WxDxH)	408 x 312.4 x 68 mm	408 x 312.4 x 90.85 mm	408 x 312.4 x 68 mm	408 x 312.4 x 90.85 mm
Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)			
Operating System				
Windows	Windows 10 , Windows 8.1 , Windows 7			
Environment				
Operating Temp.	0℃ to 65℃		0℃ to 65℃	
Shock	15 Grms, According to IEC60068-2-27			
Vibration	1.5 Grms, According to IEC60068-2-64			
Front Panel Protection	IP65 Compliant			
EMC	CE, FCC Class A			
Safety	-			

Specifications

Model Name	CV-117/P1001			
Model No.	CV-117R/P1001	CV-117R/P1001E	CV-117C/P1001	CV-117C/P1001E
Display — LCD Size	17" TFT-LCD			
Max. Resolution	1280 x 1024			
Brightness (cd/m2)	350			
Backlight MTBF	50,000 hrs (LED Backlight)			
Touch — Resistive 5-wire	V		-	
Projected Capacitive	-		V	
System — Processor	Intel® Atom™ E3845			
Chipset	SoC			
Memory	1x DDR3L, Up to 8GB			
I/O Interface — Video Output	1x VGA , 1x DisplayPort , 1x CDS			
LAN	2x GbE LAN			
PoE+	-			
Serial Port	2x RS-232/422/485			
USB	1x USB3.0 , 3x USB2.0			
Isolated DIO	8x DIO (4x DI, 4x DO)			
Audio	1x Mic-in , 1x Speaker-out			
Remote Power On_Off / Reset	1 / 1			
External FAN Connector	-			
Storage — 2.5" HDD/SSD Drive Bay	1			
mSATA	-			
CFast	1			
Expansion — CDS Interface	1		1	
CFM / CMI Interface	0 / 0		0 / 0	
PCI / PCIe	-		-	
Mini PCI Express	1		1	
M.2	-		-	
Universal I/O Bracket	-	2	-	2
SIM Socket	1		1	
Antenna Holes	2		2	
Other	-		-	
Power Requirement — Power Input Voltage	AT/ATX, 9-48 VDC			
Physical — Dimension (WxDxH)	450 x 350 x 72 mm	450 x 350 x 94.85 mm	450 x 350 x 72 mm	450 x 350 x 94.85 mm
Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)			
Operating System — Windows	Windows 10 , Windows 8.1 , Windows 7			
Environment — Operating Temp.	-20℃ to 70℃		-20℃ to 70℃	
Shock	15 Grms, According to IEC60068-2-27			
Vibration	1.5 Grms, According to IEC60068-2-64			
Front Panel Protection	IP65 Compliant			
EMC	CE, FCC Class A			
Safety	-			

Specifications

Model Name	CV-117/P1001	
Model No.	CV-117G/P1001	CV-117G/P1001E
Display LCD Size	17" TFT-LCD	
Max. Resolution	1280 x 1024	
Brightness (cd/m2)	350	
Backlight MTBF	50,000 hrs (LED Backlight)	
Touch Resistive 5-wire	-	
Projected Capacitive	-	
System Processor	Intel® Atom™ E3845	
Chipset	SoC	
Memory	1x DDR3L, Up to 8GB	
I/O Interface Video Output	1x VGA , 1x DisplayPort , 1x CDS	
LAN	2x GbE LAN	
PoE+	-	
Serial Port	2x RS-232/422/485	
USB	1x USB3.0 , 3x USB2.0	
Isolated DIO	8x DIO (4x DI, 4x DO)	
Audio	1x Mic-in , 1x Speaker-out	
Remote Power On_Off / Reset	1 / 1	
External FAN Connector	-	
Storage 2.5" HDD/SSD Drive Bay	1	
mSATA	-	
CFast	1	
Expansion CDS Interface	1	
CFM / CMI Interface	0 / 0	
PCI / PCIe	-	
Mini PCI Express	1	
M.2	-	
Universal I/O Bracket	-	2
SIM Socket	1	
Antenna Holes	2	
Other	-	
Power Requirement Power Input Voltage	AT/ATX, 9-48 VDC	
Physical Dimension (WxDxH)	450 x 350 x 72 mm	450 x 350 x 94.85 mm
Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)	
Operating System Windows	Windows 10 , Windows 8.1 , Windows 7	
Environment Operating Temp.	-20℃ to 70℃	
Shock	15 Grms, According to IEC60068-2-27	
Vibration	1.5 Grms, According to IEC60068-2-64	
Front Panel Protection	IP65 Compliant	
EMC	CE, FCC Class A	
Safety	-	

Specifications

Model Name	CV-119/P1001			
Model No.	CV-119R/P1001	CV-119R/P1001E	CV-119C/P1001	CV-119C/P1001E
Display LCD Size	19" TFT-LCD			
Max. Resolution	1280 x 1024			
Brightness (cd/m2)	350			
Backlight MTBF	50,000 hrs (LED Backlight)			
Touch Resistive 5-wire	V		-	
Projected Capacitive	-		V	
System Processor	Intel® Atom™ E3845			
Chipset	SoC			
Memory	1x DDR3L, Up to 8GB			
I/O Interface Video Output	1x VGA , 1x DisplayPort , 1x CDS			
LAN	2x GbE LAN			
PoE+	-			
Serial Port	2x RS-232/422/485			
USB	1x USB3.0 , 3x USB2.0			
Isolated DIO	8x DIO (4x DI, 4x DO)			
Audio	1x Mic-in , 1x Speaker-out			
Remote Power On_Off / Reset	1 / 1			
External FAN Connector	-			
Storage 2.5" HDD/SSD Drive Bay	1			
mSATA	-			
CFast	1			
Expansion CDS Interface	1		1	
CFM / CMI Interface	0 / 0		0 / 0	
PCI / PCIe	-		-	
Mini PCI Express	1		1	
M.2	-		-	
Universal I/O Bracket	-	2	-	2
SIM Socket	1		1	
Antenna Holes	2		2	
Other	-		-	
Power Requirement Power Input Voltage	AT/ATX, 9-48 VDC			
Physical Dimension (WxDxH)	510 x 389.3 x 72 mm	510 x 389.3 x 94.85 mm	510 x 389.3 x 72 mm	510 x 389.3 x 94.85 mm
Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)			
Operating System Windows	Windows 10 , Windows 8.1 , Windows 7			
Environment Operating Temp.	0℃ to 50℃		0℃ to 50℃	
Shock	15 Grms, According to IEC60068-2-27			
Vibration	1.5 Grms, According to IEC60068-2-64			
Front Panel Protection	IP65 Compliant			
EMC	CE, FCC Class A			
Safety	-			

Specifications

Model Name	CV-119/P1001	
Model No.	CV-119G/P1001	CV-119G/P1001E
Display LCD Size	19" TFT-LCD	
Max. Resolution	1280 x 1024	
Brightness (cd/m2)	350	
Backlight MTBF	50,000 hrs (LED Backlight)	
Touch Resistive 5-wire	-	
Projected Capacitive	-	
System Processor	Intel® Atom™ E3845	
Chipset	SoC	
Memory	1x DDR3L, Up to 8GB	
I/O Interface Video Output	1x VGA , 1x DisplayPort , 1x CDS	
LAN	2x GbE LAN	
PoE+	-	
Serial Port	2x RS-232/422/485	
USB	1x USB3.0 , 3x USB2.0	
Isolated DIO	8x DIO (4x DI, 4x DO)	
Audio	1x Mic-in , 1x Speaker-out	
Remote Power On_Off / Reset	1 / 1	
External FAN Connector	-	
Storage 2.5" HDD/SSD Drive Bay	1	
mSATA	-	
CFast	1	
Expansion CDS Interface	1	
CFM / CMI Interface	0 / 0	
PCI / PCIe	-	
Mini PCI Express	1	
M.2	-	
Universal I/O Bracket	-	2
SIM Socket	1	
Antenna Holes	2	
Other	-	
Power Requirement Power Input Voltage	AT/ATX, 9-48 VDC	
Physical Dimension (WxDxH)	510 x 389.3 x 72 mm	510 x 389.3 x 94.85 mm
Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)	
Operating System Windows	Windows 10 , Windows 8.1 , Windows 7	
Environment Operating Temp.	0°C to 50°C	
Shock	15 Grms, According to IEC60068-2-27	
Vibration	1.5 Grms, According to IEC60068-2-64	
Front Panel Protection	IP65 Compliant	
EMC	CE, FCC Class A	
Safety	-	

Specifications

Model Name	CV-W115/P1001	
Model No.	CV-W115R/P1001	CV-W115R/P1001E
Display — LCD Size	15.6" TFT-LCD	
Max. Resolution	1366 x 768	
Brightness (cd/m2)	400	
Backlight MTBF	50,000 hrs (LED Backlight)	
Touch — Resistive 5-wire	V	
Projected Capacitive	-	
System — Processor	Intel® Atom™ E3845	
Chipset	SoC	
Memory	1x DDR3L, Up to 8GB	
I/O Interface — Video Output	1x VGA , 1x DisplayPort , 1x CDS	
LAN	2x GbE LAN	
PoE+	-	
Serial Port	2x RS-232/422/485	
USB	1x USB3.0 , 3x USB2.0	
Isolated DIO	8x DIO (4x DI, 4x DO)	
Audio	1x Mic-in , 1x Speaker-out	
Remote Power On_Off / Reset	1 / 1	
External FAN Connector	-	
Storage — 2.5" HDD/SSD Drive Bay	1	
mSATA	-	
CFast	1	
Expansion — CDS Interface	1	
CFM / CMI Interface	0 / 0	
PCI / PCIe	-	
Mini PCI Express	1	
M.2	-	
Universal I/O Bracket	-	2
SIM Socket	1	
Antenna Holes	2	
Other	-	
Power Requirement — Power Input Voltage	AT/ATX, 9-48 VDC	
Physical — Dimension (WxDxH)	420 x 254 x 75 mm	420 x 254 x 97.85 mm
Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)	
Operating System — Windows	Windows 10 , Windows 8.1 , Windows 7	
Environment — Operating Temp.	0°C to 60°C	
Shock	15 Grms, According to IEC60068-2-27	
Vibration	1.5 Grms, According to IEC60068-2-64	
Front Panel Protection	IP65 Compliant	
EMC	CE, FCC Class A	
Safety	-	

Specifications

Model Name	CV-W115/P1001	
Model No.	CV-W115C/P1001	CV-W115C/P1001E
Display LCD Size	15.6" TFT-LCD	
Max. Resolution	1366 x 768	
Brightness (cd/m2)	400	
Backlight MTBF	50,000 hrs (LED Backlight)	
Touch Resistive 5-wire	-	
Projected Capacitive	V	
System Processor	Intel® Atom™ E3845	
Chipset	SoC	
Memory	1x DDR3L, Up to 8GB	
I/O Interface Video Output	1x VGA , 1x DisplayPort , 1x CDS	
LAN	2x GbE LAN	
PoE+	-	
Serial Port	2x RS-232/422/485	
USB	1x USB3.0 , 3x USB2.0	
Isolated DIO	8x DIO (4x DI, 4x DO)	
Audio	1x Mic-in , 1x Speaker-out	
Remote Power On_Off / Reset	1 / 1	
External FAN Connector	-	
Storage 2.5" HDD/SSD Drive Bay	1	
mSATA	-	
CFast	1	
Expansion CDS Interface	1	
CFM / CMI Interface	0 / 0	
PCI / PCIe	-	
Mini PCI Express	1	
M.2	-	
Universal I/O Bracket	-	2
SIM Socket	1	
Antenna Holes	2	
Other	-	
Power Requirement Power Input Voltage	AT/ATX, 9-48 VDC	
Physical Dimension (WxDxH)	420 x 254 x 75 mm	420 x 254 x 97.85 mm
Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)	
Operating System Windows	Windows 10 , Windows 8.1 , Windows 7	
Environment Operating Temp.	0°C to 60°C	
Shock	15 Grms, According to IEC60068-2-27	
Vibration	1.5 Grms, According to IEC60068-2-64	
Front Panel Protection	IP65 Compliant	
EMC	CE, FCC Class A	
Safety	-	

Specifications

Model Name	CV-W121/P1001			
Model No.	CV-W121R/P1001	CV-W121R/P1001E	CV-W121C/P1001	CV-W121C/P1001E
Display	LCD Size	21.5" TFT-LCD		
	Max. Resolution	1920 x 1080		
	Brightness (cd/m2)	300		
	Backlight MTBF	50,000 hrs (LED Backlight)		
Touch	Resistive 5-wire	V		-	
	Projected Capacitive	-		V	
System	Processor	Intel® Atom™ E3845		
	Chipset	SoC		
	Memory	1x DDR3L, Up to 8GB		
I/O Interface	Video Output	1x VGA , 1x DisplayPort , 1x CDS		
	LAN	2x GbE LAN		
	PoE+	-		
	Serial Port	2x RS-232/422/485		
	USB	1x USB3.0 , 3x USB2.0		
	Isolated DIO	8x DIO (4x DI, 4x DO)		
	Audio	1x Mic-in , 1x Speaker-out		
	Remote Power On_Off / Reset	1 / 1		
	External FAN Connector	-		
Storage	2.5" HDD/SSD Drive Bay	1		
	mSATA	-		
	CFast	1		
Expansion	CDS Interface	1		1	
	CFM / CMI Interface	0 / 0		0 / 0	
	PCI / PCIe	-		-	
	Mini PCI Express	1		1	
	M.2	-		-	
	Universal I/O Bracket	-	2	-	2
	SIM Socket	1		1	
	Antenna Holes	2		2	
	Other	-		-	
Power Requirement	Power Input Voltage	AT/ATX, 9-48 VDC		
Physical	Dimension (WxDxH)	550 x 330.5 x 72 mm	550 x 330.5 x 94.5 mm	550 x 330.5 x 72 mm	550 x 330.5 x 94.5 mm
	Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)		
Operating System	Windows	Windows 10 , Windows 8.1 , Windows 7		
Environment	Operating Temp.	0℃ to 60℃		0℃ to 60℃	
	Shock	15 Grms, According to IEC60068-2-27		
	Vibration	1.5 Grms, According to IEC60068-2-64		
	Front Panel Protection	IP65 Compliant		
	EMC	CE, FCC Class A		
	Safety	-		

Specifications

Model Name	CV-W121/P1001	
Model No.	CV-W121G/P1001	CV-W121G/P1001E
Display LCD Size	21.5" TFT-LCD	
Max. Resolution	1920 x 1080	
Brightness (cd/m2)	300	
Backlight MTBF	50,000 hrs (LED Backlight)	
Touch Resistive 5-wire	-	
Projected Capacitive	-	
System Processor	Intel® Atom™ E3845	
Chipset	SoC	
Memory	1x DDR3L, Up to 8GB	
I/O Interface Video Output	1x VGA , 1x DisplayPort , 1x CDS	
LAN	2x GbE LAN	
PoE+	-	
Serial Port	2x RS-232/422/485	
USB	1x USB3.0 , 3x USB2.0	
Isolated DIO	8x DIO (4x DI, 4x DO)	
Audio	1x Mic-in , 1x Speaker-out	
Remote Power On_Off / Reset	1 / 1	
External FAN Connector	-	
Storage 2.5" HDD/SSD Drive Bay	1	
mSATA	-	
CFast	1	
Expansion CDS Interface	1	
CFM / CMI Interface	0 / 0	
PCI / PCIe	-	
Mini PCI Express	1	
M.2	-	
Universal I/O Bracket	-	2
SIM Socket	1	
Antenna Holes	2	
Other	-	
Power Requirement Power Input Voltage	AT/ATX, 9-48 VDC	
Physical Dimension (WxDxH)	550 x 330.5 x 72 mm	550 x 330.5 x 94.5 mm
Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)	
Operating System Windows	Windows 10 , Windows 8.1 , Windows 7	
Environment Operating Temp.	0°C to 60°C	
Shock	15 Grms, According to IEC60068-2-27	
Vibration	1.5 Grms, According to IEC60068-2-64	
Front Panel Protection	IP65 Compliant	
EMC	CE, FCC Class A	
Safety	-	

Specifications

Model Name	CV-W124/P1001			
Model No.	CV-W124R/P1001	CV-W124R/P1001E	CV-W124C/P1001	CV-W124C/P1001E
Display — LCD Size	24" TFT-LCD			
Max. Resolution	1920 x 1080			
Brightness (cd/m2)	300			
Backlight MTBF	50,000 hrs (LED Backlight)			
Touch — Resistive 5-wire	V		-	
Projected Capacitive	-		V	
System — Processor	Intel® Atom™ E3845			
Chipset	SoC			
Memory	1x DDR3L, Up to 8GB			
I/O Interface — Video Output	1x VGA , 1x DisplayPort , 1x CDS			
LAN	2x GbE LAN			
PoE+	-			
Serial Port	2x RS-232/422/485			
USB	1x USB3.0 , 3x USB2.0			
Isolated DIO	8x DIO (4x DI, 4x DO)			
Audio	1x Mic-in , 1x Speaker-out			
Remote Power On_Off / Reset	1 / 1			
External FAN Connector	-			
Storage — 2.5" HDD/SSD Drive Bay	1			
mSATA	-			
CFast	1			
Expansion — CDS Interface	1		1	
CFM / CMI Interface	0 / 0		0 / 0	
PCI / PCIe	-		-	
Mini PCI Express	1		1	
M.2	-		-	
Universal I/O Bracket	-	2	-	2
SIM Socket	1		1	
Antenna Holes	2		2	
Other	-		-	
Power Requirement — Power Input Voltage	AT/ATX, 9-48 VDC			
Physical — Dimension (WxDxH)	605 x 373 x 72 mm	605 x 373 x 94.5 mm	605 x 373 x 72 mm	605 x 373 x 94.5 mm
Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)			
Operating System — Windows	Windows 10 , Windows 8.1 , Windows 7			
Environment — Operating Temp.	-10℃ to 60℃		-20℃ to 70℃	
Shock	15 Grms, According to IEC60068-2-27			
Vibration	1.5 Grms, According to IEC60068-2-64			
Front Panel Protection	IP65 Compliant			
EMC	CE, FCC Class A			
Safety	-			

Specifications

Model Name	CV-W124/P1001	
Model No.	CV-W124G/P1001	CV-W124G/P1001E
Display LCD Size	24" TFT-LCD	
Max. Resolution	1920 x 1080	
Brightness (cd/m2)	300	
Backlight MTBF	50,000 hrs (LED Backlight)	
Touch Resistive 5-wire	-	
Projected Capacitive	-	
System Processor	Intel® Atom™ E3845	
Chipset	SoC	
Memory	1x DDR3L, Up to 8GB	
I/O Interface Video Output	1x VGA , 1x DisplayPort , 1x CDS	
LAN	2x GbE LAN	
PoE+	-	
Serial Port	2x RS-232/422/485	
USB	1x USB3.0 , 3x USB2.0	
Isolated DIO	8x DIO (4x DI, 4x DO)	
Audio	1x Mic-in , 1x Speaker-out	
Remote Power On_Off / Reset	1 / 1	
External FAN Connector	-	
Storage 2.5" HDD/SSD Drive Bay	1	
mSATA	-	
CFast	1	
Expansion CDS Interface	1	
CFM / CMI Interface	0 / 0	
PCI / PCIe	-	
Mini PCI Express	1	
M.2	-	
Universal I/O Bracket	-	2
SIM Socket	1	
Antenna Holes	2	
Other	-	
Power Requirement Power Input Voltage	AT/ATX, 9-48 VDC	
Physical Dimension (WxDxH)	605 x 373 x 72 mm	605 x 373 x 94.5 mm
Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)	
Operating System Windows	Windows 10 , Windows 8.1 , Windows 7	
Environment Operating Temp.	-20℃ to 70℃	
Shock	15 Grms, According to IEC60068-2-27	
Vibration	1.5 Grms, According to IEC60068-2-64	
Front Panel Protection	IP65 Compliant	
EMC	CE, FCC Class A	
Safety	-	

CS-100 / P2000 series

Sunlight Readable High Performance Panel PC

- 12.1" to 21.5" TFT-LCD with Ultra High Brightness
- Onboard Mobile Intel® Core™ U-series Processor
- Wide Operating Temperature (-20°C to 70°C)
- True Flat IP65 Front Panel Protection
- 2x GbE LAN, 6x COM, 5x USB, 16x Isolated DIO
- Mini-PCIe Socket for wireless and I/O Expansion
- CFM Technology for PoE and Power Ignition Sensing (IGN) Functions
- PCI/PCIe Expandable Version Available

This all-in-one sunlight readable panel PC series is available in display sizes from 12- to 21.5-inch with projected capacitive touch screen, powered by U series Intel® Core™ processor with only 15 watt power consumption. It is a rugged and reliable panel PC with 1,600 nits high-brightness display dedicated to outdoor use.

High Performance
Per Watt

Powered by an ultra-low power Intel® Core™ U-series processor, the CS-100/P2000 can fulfill a variety of applications that require high-performance computing and a low power budget.
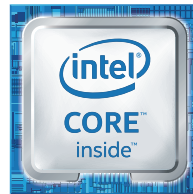
Low Power Consumption

Built For
Extreme Temperatures

With its unique selection of industrial-grade components for wide operating temperature ranges, the CS-100/P2000 series is suitable for deployment in extreme environments and severe climates.

Sunlight Readable

Ultra-high brightness enhances readability, so the CS-100/P2000 series is suitable for all lighting conditions, including direct sunlight.

Normal Panel PC | Cincoze Sunlight Readable Panel PC

Specifications

Model Name	CS-112H/P2102		CS-115/P2102	
Model No.	CS-112HC/P2102-i5 CS-112HC/P2102-i3	CS-112HC/P2102E-i5 CS-112HC/P2102E-i3	CS-115C/P2102-i5 CS-115C/P2102-i3	CS-115C/P2102E-i5 CS-115C/P2102E-i3
Display — LCD Size	12.1" TFT-LCD		15" TFT-LCD	
Display — Max. Resolution	1024 x 768		1024 x 768	
Display — Brightness (cd/m2)	1,500		1,600	
Display — Backlight MTBF	30,000 hrs (LED Backlight)		50,000 hrs (LED Backlight)	
Touch — Resistive 5-wire	-		-	
Touch — Projected Capacitive	V		V	
System — Processor	Intel® Core™ i5-8365UE , Intel® Core™ i3-8145UE			
System — Chipset	SoC			
System — Memory	2x DDR4, Up to 64GB			
I/O Interface — Video Output	1x VGA , 1x DisplayPort , 1x CDS			
I/O Interface — LAN	2x GbE LAN			
I/O Interface — PoE+	Optional: 2x PoE+			
I/O Interface — Serial Port	4x RS-232/422/485			
I/O Interface — USB	3x USB3.2 , 2x USB2.0			
I/O Interface — Isolated DIO	16x DIO (8x DI, 8x DO)			
I/O Interface — Audio	1x Mic-in , 1x Speaker-out			
I/O Interface — Remote Power On_Off / Reset	1 / 1			
I/O Interface — External FAN Connector	-			
Storage — 2.5" HDD/SSD Drive Bay	2			
Storage — mSATA	-			
Storage — CFast	-			
Expansion — CDS Interface	1		1	
Expansion — CFM / CMI Interface	2 / 0		2 / 0	
Expansion — PCI / PCIe	-	Optional: 1x PCI or 1x PCIex4	-	Optional: 1x PCI or 1x PCIex4
Expansion — Mini PCI Express	2		2	
Expansion — M.2	1x M.2 2230 E Key		1x M.2 2230 E Key	
Expansion — Universal I/O Bracket	-	2	-	2
Expansion — SIM Socket	1		1	
Expansion — Antenna Holes	4		4	
Expansion — Other	Power Ignition Sensing (IGN) Function		Power Ignition Sensing (IGN) Function	
Power Requirement — Power Input Voltage	AT/ATX, 9-48 VDC			
Physical — Dimension (WxDxH)	254.5 x 190 x 41.5mm	254.5 x 190 x 61mm	254.5 x 190 x 41.5mm	254.5 x 190 x 61mm
Physical — Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)			
Operating System — Windows	Windows 10			
Environment — Operating Temp.	-20℃ to 70℃			
Environment — Shock	15 Grms, According to IEC60068-2-27			
Environment — Vibration	1.5 Grms, According to IEC60068-2-64			
Environment — Front Panel Protection	IP65 Compliant			
Environment — EMC	CE, FCC Class A			
Environment — Safety	-			

Specifications

Model Name	CS-117/P2102		CS-119/P2102	
Model No.	CS-117C/P2102-i5 CS-117C/P2102-i3	CS-117C/P2102E-i5 CS-117C/P2102E-i3	CS-119C/P2102-i5 CS-119C/P2102-i3	CS-119C/P2102E-i5 CS-119C/P2102E-i3
Display — LCD Size	17" TFT-LCD		19" TFT-LCD	
Display — Max. Resolution	1280 x 1024		1280 x 1024	
Display — Brightness (cd/m2)	1,500		1,600	
Display — Backlight MTBF	50,000 hrs (LED Backlight)		50,000 hrs (LED Backlight)	
Touch — Resistive 5-wire	-		-	
Touch — Projected Capacitive	V		V	
System — Processor	Intel® Core™ i5-8365UE , Intel® Core™ i3-8145UE			
System — Chipset	SoC			
System — Memory	2x DDR4, Up to 64GB			
I/O Interface — Video Output	1x VGA , 1x DisplayPort , 1x CDS			
I/O Interface — LAN	2x GbE LAN			
I/O Interface — PoE+	Optional: 2x PoE+			
I/O Interface — Serial Port	4x RS-232/422/485			
I/O Interface — USB	3x USB3.2 , 2x USB2.0			
I/O Interface — Isolated DIO	16x DIO (8x DI, 8x DO)			
I/O Interface — Audio	1x Mic-in , 1x Speaker-out			
I/O Interface — Remote Power On_Off / Reset	1 / 1			
I/O Interface — External FAN Connector	-			
Storage — 2.5" HDD/SSD Drive Bay	2			
Storage — mSATA	-			
Storage — CFast	-			
Expansion — CDS Interface	1		1	
Expansion — CFM / CMI Interface	2 / 0		2 / 0	
Expansion — PCI / PCIe	-	Optional: 1x PCI or 1x PCIex4	-	Optional: 1x PCI or 1x PCIex4
Expansion — Mini PCI Express	2		2	
Expansion — M.2	1x M.2 2230 E Key		1x M.2 2230 E Key	
Expansion — Universal I/O Bracket	-	2	-	2
Expansion — SIM Socket	1		1	
Expansion — Antenna Holes	4		4	
Expansion — Other	Power Ignition Sensing (IGN) Function		Power Ignition Sensing (IGN) Function	
Power Requirement — Power Input Voltage	AT/ATX, 9-48 VDC			
Physical — Dimension (WxDxH)	254.5 x 190 x 41.5mm	254.5 x 190 x 61mm	254.5 x 190 x 41.5mm	254.5 x 190 x 61mm
Physical — Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)			
Operating System — Windows	Windows 10			
Environment — Operating Temp.	-20℃ to 70℃			
Environment — Shock	15 Grms, According to IEC60068-2-27			
Environment — Vibration	1.5 Grms, According to IEC60068-2-64			
Environment — Front Panel Protection	IP65 Compliant			
Environment — EMC	CE, FCC Class A			
Environment — Safety	-			

Specifications

Model Name	CS-112H/P2002			
Model No.	CS-112HC/P2002-i5 CS-112HC/P2002-i3	CS-112HC/P2002E-i5 CS-112HC/P2002E-i3	CS-112HC/P2002E-i5-E4 CS-112HC/P2002E-i3-E4	CS-112HC/P2002E-i5-PI CS-112HC/P2002E-i3-PI

Display	LCD Size	12.1" TFT-LCD
	Max. Resolution	1024 x 768
	Brightness (cd/m2)	1,500
	Backlight MTBF	30,000 hrs (LED Backlight)
Touch	Resistive 5-wire	-
	Projected Capacitive	V
System	Processor	Intel® Core™ i5-6300U , Intel® Core™ i3-6100U
	Chipset	SoC
	Memory	2x DDR4, Up to 32GB
I/O Interface	Video Output	1x VGA , 1x DVI-D , 1x CDS
	LAN	2x GbE LAN
	PoE+	Optional: 2x PoE+
	Serial Port	6x RS-232/422/485
	USB	4x USB3.0 , 1x USB2.0
	Isolated DIO	16x DIO (8x DI, 8x DO)
	Audio	1x Mic-in , 1x Speaker-out
	Remote Power On_Off / Reset	1 / 1
	External FAN Connector	1
Storage	2.5" HDD/SSD Drive Bay	2
	mSATA	2
	CFast	1
Expansion	CDS Interface	1
	CFM / CMI Interface	2 / 0
Power Requirement	Power Input Voltage	AT/ATX, 9-48 VDC
Operating System	Windows	Windows 10 , Windows 8.1 , Windows 7
Environment	Operating Temp.	-20°C to 70°C
	Shock	15 Grms, According to IEC60068-2-27
	Vibration	1.5 Grms, According to IEC60068-2-64
	Front Panel Protection	IP65 Compliant
	EMC	CE, FCC Class A
	Safety	-

Expansion - PCI / PCIe:

	CS-112HC/P2002-i5/i3	CS-112HC/P2002E-i5/i3	CS-112HC/P2002E-i5/i3-E4	CS-112HC/P2002E-i5/i3-PI
PCI / PCIe	-	Optional: 1x PCI or 1x PCIex4	1x PCIex4	1x PCI
Mini PCI Express	2			
M.2	-			
Universal I/O Bracket	1			
SIM Socket	1			
Antenna Holes	4			
Other	Power Ignition Sensing (IGN) Function			

Physical - Dimension (WxDxH):

	CS-112HC/P2002-i5/i3	CS-112HC/P2002E
Dimension (WxDxH)	254.5 x 220 x 54 mm	254.5 x 220 x 72 mm
Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)	

Specifications

Model Name	CS-115/P2002			
Model No.	CS-115C/P2002-i5 CS-115C/P2002-i3	CS-115C/P2002E-i5 CS-115C/P2002E-i3	CS-115C/P2002E-i5-E4 CS-115C/P2002E-i3-E4	CS-115C/P2002E-i5-PI CS-115C/P2002E-i3-PI
Display — LCD Size	15" TFT-LCD			
Max. Resolution	1024 x 768			
Brightness (cd/m2)	1,600			
Backlight MTBF	50,000 hrs (LED Backlight)			
Touch — Resistive 5-wire	-			
Projected Capacitive	V			
System — Processor	Intel® Core™ i5-6300U , Intel® Core™ i3-6100U			
Chipset	SoC			
Memory	2x DDR4, Up to 32GB			
I/O Interface — Video Output	1x VGA , 1x DVI-D , 1x CDS			
LAN	2x GbE LAN			
PoE+	Optional: 2x PoE+			
Serial Port	6x RS-232/422/485			
USB	4x USB3.0 , 1x USB2.0			
Isolated DIO	16x DIO (8x DI, 8x DO)			
Audio	1x Mic-in , 1x Speaker-out			
Remote Power On_Off / Reset	1 / 1			
External FAN Connector	1			
Storage — 2.5" HDD/SSD Drive Bay	2			
mSATA	2			
CFast	1			
Expansion — CDS Interface	1			
CFM / CMI Interface	2 / 0			
PCI / PCIe	-	Optional: 1x PCI or 1x PCIex4	1x PCIex4	1x PCI
Mini PCI Express	2			
M.2	-			
Universal I/O Bracket	1			
SIM Socket	1			
Antenna Holes	4			
Other	Power Ignition Sensing (IGN) Function			
Power Requirement — Power Input Voltage	AT/ATX, 9-48 VDC			
Physical — Dimension (WxDxH)	254.5 x 220 x 54 mm	254.5 x 220 x 72 mm		
Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)			
Operating System — Windows	Windows 10 , Windows 8.1 , Windows 7			
Environment — Operating Temp.	-20℃ to 70℃			
Shock	15 Grms, According to IEC60068-2-27			
Vibration	1.5 Grms, According to IEC60068-2-64			
Front Panel Protection	IP65 Compliant			
EMC	CE, FCC Class A			
Safety	-			

Specifications

Model Name	CS-117/P2002			
Model No.	CS-117C/P2002-i5 CS-117C/P2002-i3	CS-117C/P2002E-i5 CS-117C/P2002E-i3	CS-117C/P2002E-i5-E4 CS-117C/P2002E-i3-E4	CS-117C/P2002E-i5-PI CS-117C/P2002E-i3-PI
Display — LCD Size	17" TFT-LCD			
Max. Resolution	1280 x 1024			
Brightness (cd/m2)	1,500			
Backlight MTBF	50,000 hrs (LED Backlight)			
Touch — Resistive 5-wire	-			
Projected Capacitive	V			
System — Processor	Intel® Core™ i5-6300U , Intel® Core™ i3-6100U			
Chipset	SoC			
Memory	2x DDR4, Up to 32GB			
I/O Interface — Video Output	1x VGA , 1x DVI-D , 1x CDS			
LAN	2x GbE LAN			
PoE+	Optional: 2x PoE+			
Serial Port	6x RS-232/422/485			
USB	4x USB3.0 , 1x USB2.0			
Isolated DIO	16x DIO (8x DI, 8x DO)			
Audio	1x Mic-in , 1x Speaker-out			
Remote Power On_Off / Reset	1 / 1			
External FAN Connector	1			
Storage — 2.5" HDD/SSD Drive Bay	2			
mSATA	2			
CFast	1			
Expansion — CDS Interface	1			
CFM / CMI Interface	2 / 0			
PCI / PCIe	-	Optional: 1x PCI or 1x PCIex4	1x PCIex4	1x PCI
Mini PCI Express	2			
M.2	-			
Universal I/O Bracket	1			
SIM Socket	1			
Antenna Holes	4			
Other	Power Ignition Sensing (IGN) Function			
Power Requirement — Power Input Voltage	AT/ATX, 9-48 VDC			
Physical — Dimension (WxDxH)	254.5 x 220 x 54 mm	254.5 x 220 x 72 mm		
Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)			
Operating System — Windows	Windows 10 , Windows 8.1 , Windows 7			
Environment — Operating Temp.	-20℃ to 70℃			
Shock	15 Grms, According to IEC60068-2-27			
Vibration	1.5 Grms, According to IEC60068-2-64			
Front Panel Protection	IP65 Compliant			
EMC	CE, FCC Class A			
Safety	-			

Specifications

Model Name	CS-119/P2002			
Model No.	CS-119C/P2002-i5 CS-119C/P2002-i3	CS-119C/P2002E-i5 CS-119C/P2002E-i3	CS-119C/P2002E-i5-E4 CS-119C/P2002E-i3-E4	CS-119C/P2002E-i5-PI CS-119C/P2002E-i3-PI
Display — LCD Size	19" TFT-LCD			
Display — Max. Resolution	1280 x 1024			
Display — Brightness (cd/m2)	1,600			
Display — Backlight MTBF	50,000 hrs (LED Backlight)			
Touch — Resistive 5-wire	-			
Touch — Projected Capacitive	V			
System — Processor	Intel® Core™ i5-6300U , Intel® Core™ i3-6100U			
System — Chipset	SoC			
System — Memory	2x DDR4, Up to 32GB			
I/O Interface — Video Output	1x VGA , 1x DVI-D , 1x CDS			
I/O Interface — LAN	2x GbE LAN			
I/O Interface — PoE+	Optional: 2x PoE+			
I/O Interface — Serial Port	6x RS-232/422/485			
I/O Interface — USB	4x USB3.0 , 1x USB2.0			
I/O Interface — Isolated DIO	16x DIO (8x DI, 8x DO)			
I/O Interface — Audio	1x Mic-in , 1x Speaker-out			
I/O Interface — Remote Power On_Off / Reset	1 / 1			
I/O Interface — External FAN Connector	1			
Storage — 2.5" HDD/SSD Drive Bay	2			
Storage — mSATA	2			
Storage — CFast	1			
Expansion — CDS Interface	1			
Expansion — CFM / CMI Interface	2 / 0			
Expansion — PCI / PCIe	-	Optional: 1x PCI or 1x PCIex4	1x PCIex4	1x PCI
Expansion — Mini PCI Express	2			
Expansion — M.2	-			
Expansion — Universal I/O Bracket	1			
Expansion — SIM Socket	1			
Expansion — Antenna Holes	4			
Expansion — Other	Power Ignition Sensing (IGN) Function			
Power Requirement — Power Input Voltage	AT/ATX, 9-48 VDC			
Physical — Dimension (WxDxH)	254.5 x 220 x 54 mm	254.5 x 220 x 72 mm		
Physical — Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)			
Operating System — Windows	Windows 10 , Windows 8.1 , Windows 7			
Environment — Operating Temp.	-20℃ to 70℃			
Environment — Shock	15 Grms, According to IEC60068-2-27			
Environment — Vibration	1.5 Grms, According to IEC60068-2-64			
Environment — Front Panel Protection	IP65 Compliant			
Environment — EMC	CE, FCC Class A			
Environment — Safety	-			

CS-100 / P1000 series

Sunlight Readable Power Efficient Panel PC

- 8.4" to 21.5" TFT-LCD with Ultra High Brightness
- OnBoard Intel® Atom® / Pentium® SoC Processor
- Wide Operating Temperature (-20℃ to 70℃)
- True Flat IP65 Front Panel Protection
- 2x GbE LAN, 4x USB, 2x COM, 8x Isolated DIO
- Mini-PCIe Socket for Wireless and I/O Expansion

This all-in-one sunlight readable panel PC series is available in display sizes from 8.4- to 21.5-inch with projected capacitive touch screen, and is powered by Intel® Atom™ / Pentium Quad-Core Processor. It is a rugged and reliable panel PC with a backlight brightness of up to 1,600 nits perfect for outdoor environments

Wide Temperature

CS-100/P1000 series supports a wide operating temperature from -20°C to 70°C and is suitable for deployment in extreme and harsh environments.

Rich I/O Connectivity

CS-100/P1000 series accommodates rich I/O interfaces, including VGA, DisplayPort, GbE LAN, USB 3.2, RS-232/422/485, and isolated DIO to interconnect to peripherals.

Sunlight Readable

Ultra-high brightness 1,600 nits makes the CS-100/P1000 series suitable for all lighting conditions, including direct sunlight.

Normal Panel PC   Cincoze Sunlight Readable Panel PC

Specifications

Model Name	CS-108/P1101	CS-110H/P1101	CS-112H/P1101
Model No.	CS-108C/P1101-E50 CS-108C/P1101-N42	CS-110HC/P1101-E50 CS-110HC/P1101-N42	CS-112HC/P1101-E50 CS-112HC/P1101-N42
Display — LCD Size	8.4" TFT-LCD	10.4" TFT-LCD	12.1" TFT-LCD
Display — Max. Resolution	800 x 600	1024 x 768	1024 x 768
Display — Brightness (cd/m2)	1,600	1,500	1,500
Display — Backlight MTBF	50,000 hrs (LED Backlight)	50,000 hrs (LED Backlight)	30,000 hrs (LED Backlight)
Touch — Resistive 5-wire	-	-	-
Touch — Projected Capacitive	V	V	V
System — Processor	Intel® Atom® x7-E3950 , Intel® Pentium® N4200		
System — Chipset	SoC		
System — Memory	1x DDR3L, Up to 8GB		
I/O Interface — Video Output	1x VGA , 1x DisplayPort , 1x CDS		
I/O Interface — LAN	2x GbE LAN		
I/O Interface — PoE+	Optional: 2x PoE+		
I/O Interface — Serial Port	4x RS-232/422/485		
I/O Interface — USB	4x USB3.0		
I/O Interface — Isolated DIO	8x DIO (4x DI, 4x DO)		
I/O Interface — Audio	1x Mic-in , 1x Speaker-out		
I/O Interface — Remote Power On_Off / Reset	1 / 1		
I/O Interface — External FAN Connector	-		
Storage — 2.5" HDD/SSD Drive Bay	1		
Storage — mSATA	1		
Storage — CFast	-		
Expansion — CDS Interface	1		
Expansion — CFM / CMI Interface	2 / 0		
Expansion — PCI / PCIe	-		
Expansion — Mini PCI Express	2		
Expansion — M.2	-		
Expansion — Universal I/O Bracket	-		
Expansion — SIM Socket	1		
Expansion — Antenna Holes	4		
Expansion — Other	Power Ignition Sensing (IGN) Function		
Power Requirement — Power Input Voltage	AT/ATX, 9-48 VDC		
Physical — Dimension (WxDxH)	204.5 X 149 X 41.5 mm	295 x 227.3 x 69.35 mm	345 x 265.3 x 69.85 mm
Physical — Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)		
Operating System — Windows	Windows 10		
Environment — Operating Temp.	-20°C to 70°C		
Environment — Shock	15 Grms, According to IEC60068-2-27		
Environment — Vibration	1.5 Grms, According to IEC60068-2-64		
Environment — Front Panel Protection	IP65 Compliant		
Environment — EMC	CE, FCC Class A		
Environment — Safety	-		

Specifications

Model Name	CS-115/P1101	CS-117/P1101	CS-119/P1101
Model No.	CS-115C/P1101-E50 CS-115C/P1101-N42	CS-117C/P1101-E50 CS-117C/P1101-N42	CS-119C/P1101-E50 CS-119C/P1101-N42

		CS-115/P1101	CS-117/P1101	CS-119/P1101
Display	LCD Size	15" TFT-LCD	17" TFT-LCD	19" TFT-LCD
	Max. Resolution	1024 x 768	1280 x 1024	1280 x 1024
	Brightness (cd/m2)	1,600	1,500	1,600
	Backlight MTBF	50,000 hrs (LED Backlight)	50,000 hrs (LED Backlight)	50,000 hrs (LED Backlight)
Touch	Resistive 5-wire	-	-	-
	Projected Capacitive	V	V	V
System	Processor	Intel® Atom® x7-E3950 , Intel® Pentium® N4200		
	Chipset	SoC		
	Memory	1x DDR3L, Up to 8GB		
I/O Interface	Video Output	1x VGA , 1x DisplayPort , 1x CDS		
	LAN	2x GbE LAN		
	PoE+	Optional: 2x PoE+		
	Serial Port	4x RS-232/422/485		
	USB	4x USB3.0		
	Isolated DIO	8x DIO (4x DI, 4x DO)		
	Audio	1x Mic-in , 1x Speaker-out		
	Remote Power On_Off / Reset	1 / 1		
	External FAN Connector	-		
Storage	2.5" HDD/SSD Drive Bay	1		
	mSATA	1		
	CFast	-		
Expansion	CDS Interface	1		
	CFM / CMI Interface	2 / 0		
	PCI / PCIe	-		
	Mini PCI Express	2		
	M.2	-		
	Universal I/O Bracket	-		
	SIM Socket	1		
	Antenna Holes	4		
	Other	Power Ignition Sensing (IGN) Function		
Power Requirement	Power Input Voltage	AT/ATX, 9-48 VDC		
Physical	Dimension (WxDxH)	408 x 312.4 x 72.35 mm	450 x 350 x 76.35 mm	510 x 389.3 x 76.35 mm
	Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)		
Operating System	Windows	Windows 10		
Environment	Operating Temp.	-20°C to 70°C		
	Shock	15 Grms, According to IEC60068-2-27		
	Vibration	1.5 Grms, According to IEC60068-2-64		
	Front Panel Protection	IP65 Compliant		
	EMC	CE, FCC Class A		
	Safety	-		

Specifications

Model Name	CS-108/P1001		CS-110H/P1001	
Model No.	CS-108C/P1001	CS-108C/P1001E	CS-110HC/P1001	CS-110HC/P1001E
Display LCD Size	8.4" TFT-LCD		10.4" TFT-LCD	
Max. Resolution	800 x 600		1024 x 768	
Brightness (cd/m2)	1,600		1,500	
Backlight MTBF	50,000 hrs (LED Backlight)		50,000 hrs (LED Backlight)	
Touch Resistive 5-wire	-		-	
Projected Capacitive	V		V	
System Processor	Intel® Atom™ E3845			
Chipset	SoC			
Memory	1x DDR3L, Up to 8GB			
I/O Interface Video Output	1x VGA , 1x DisplayPort , 1x CDS			
LAN	2x GbE LAN			
PoE+	-			
Serial Port	2x RS-232/422/485			
USB	1x USB3.0 , 3x USB2.0			
Isolated DIO	8x DIO (4x DI, 4x DO)			
Audio	1x Mic-in , 1x Speaker-out			
Remote Power On_Off / Reset	1 / 1			
External FAN Connector	-			
Storage 2.5" HDD/SSD Drive Bay	1			
mSATA	-			
CFast	1			
Expansion CDS Interface	1		1	
CFM / CMI Interface	0 / 0		0 / 0	
PCI / PCIe	-		-	
Mini PCI Express	1		1	
M.2	-		-	
Universal I/O Bracket	-	2	-	2
SIM Socket	1		1	
Antenna Holes	2		2	
Other	-		-	
Power Requirement Power Input Voltage	AT/ATX, 9-48 VDC			
Physical Dimension (WxDxH)	262 x 186.2 x 65 mm	262 x 186.2 x 87.85 mm	295 x 227.3 x 65 mm	295 x 227.3 x 87.85 mm
Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)			
Operating System Windows	Windows 10 , Windows 8.1 , Windows 7			
Environment Operating Temp.	-20℃ to 70℃			
Shock	15 Grms, According to IEC60068-2-27			
Vibration	1.5 Grms, According to IEC60068-2-64			
Front Panel Protection	IP65 Compliant			
EMC	CE, FCC Class A			
Safety	-			

Specifications

	Model Name	CS-112H/P1001		CS-115/P1001	
	Model No.	CS-112HC/P1001	CS-112HC/P1001E	CS-115C/P1001	CS-115C/P1001E
Display	LCD Size	12.1" TFT-LCD		15" TFT-LCD	
	Max. Resolution	1024 x 768		1024 x 768	
	Brightness (cd/m2)	1,500		1,600	
	Backlight MTBF	30,000 hrs (LED Backlight)		50,000 hrs (LED Backlight)	
Touch	Resistive 5-wire	-		-	
	Projected Capacitive	V		V	
System	Processor	Intel® Atom™ E3845			
	Chipset	SoC			
	Memory	1x DDR3L, Up to 8GB			
I/O Interface	Video Output	1x VGA , 1x DisplayPort , 1x CDS			
	LAN	2x GbE LAN			
	PoE+	-			
	Serial Port	2x RS-232/422/485			
	USB	1x USB3.0 , 3x USB2.0			
	Isolated DIO	8x DIO (4x DI, 4x DO)			
	Audio	1x Mic-in , 1x Speaker-out			
	Remote Power On_Off / Reset	1 / 1			
	External FAN Connector	-			
Storage	2.5" HDD/SSD Drive Bay	1			
	mSATA	-			
	CFast	1			
Expansion	CDS Interface	1		1	
	CFM / CMI Interface	0 / 0		0 / 0	
	PCI / PCIe	-		-	
	Mini PCI Express	1		1	
	M.2	-		-	
	Universal I/O Bracket	-	2	-	2
	SIM Socket	1		1	
	Antenna Holes	2		2	
	Other	-		-	
Power Requirement	Power Input Voltage	AT/ATX, 9-48 VDC			
Physical	Dimension (WxDxH)	345 x 265.3 x 65.5 mm	345 x 265.3 x 88.35 mm	408 x 312.4 x 68 mm	408 x 312.4 x 90.85 mm
	Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)			
Operating System	Windows	Windows 10 , Windows 8.1 , Windows 7			
Environment	Operating Temp.	-20°C to 70°C			
	Shock	15 Grms, According to IEC60068-2-27			
	Vibration	1.5 Grms, According to IEC60068-2-64			
	Front Panel Protection	IP65 Compliant			
	EMC	CE, FCC Class A			
	Safety	-			

Specifications

Model Name	CS-117/P1001	
Model No.	CS-117C/P1001	CS-117C/P1001E

Display	LCD Size	17" TFT-LCD	
	Max. Resolution	1280 x 1024	
	Brightness (cd/m2)	1,500	
	Backlight MTBF	50,000 hrs (LED Backlight)	
Touch	Resistive 5-wire	-	
	Projected Capacitive	V	
System	Processor	Intel® Atom™ E3845	
	Chipset	SoC	
	Memory	1x DDR3L, Up to 8GB	
I/O Interface	Video Output	1x VGA , 1x DisplayPort , 1x CDS	
	LAN	2x GbE LAN	
	PoE+	-	
	Serial Port	2x RS-232/422/485	
	USB	1x USB3.0 , 3x USB2.0	
	Isolated DIO	8x DIO (4x DI, 4x DO)	
	Audio	1x Mic-in , 1x Speaker-out	
	Remote Power On_Off / Reset	1 / 1	
	External FAN Connector	-	
Storage	2.5" HDD/SSD Drive Bay	1	
	mSATA	-	
	CFast	1	
Expansion	CDS Interface	1	
	CFM / CMI Interface	0 / 0	
	PCI / PCIe	-	
	Mini PCI Express	1	
	M.2	-	
	Universal I/O Bracket	-	2
	SIM Socket	1	
	Antenna Holes	2	
	Other	-	
Power Requirement	Power Input Voltage	AT/ATX, 9-48 VDC	
Physical	Dimension (WxDxH)	450 x 350 x 72 mm	450 x 350 x 94.85 mm
	Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)	
Operating System	Windows	Windows 10 , Windows 8.1 , Windows 7	
Environment	Operating Temp.	-20℃ to 70℃	
	Shock	15 Grms, According to IEC60068-2-27	
	Vibration	1.5 Grms, According to IEC60068-2-64	
	Front Panel Protection	IP65 Compliant	
	EMC	CE, FCC Class A	
	Safety	-	

Specifications

Model Name		CS-119/P1001
Model No.	CS-119C/P1001	CS-119C/P1001E
Display LCD Size	19" TFT-LCD	
Max. Resolution	1280 x 1024	
Brightness (cd/m2)	1,600	
Backlight MTBF	50,000 hrs (LED Backlight)	
Touch Resistive 5-wire	-	
Projected Capacitive	V	
System Processor	Intel® Atom™ E3845	
Chipset	SoC	
Memory	1x DDR3L, Up to 8GB	
I/O Interface Video Output	1x VGA , 1x DisplayPort , 1x CDS	
LAN	2x GbE LAN	
PoE+	-	
Serial Port	2x RS-232/422/485	
USB	1x USB3.0 , 3x USB2.0	
Isolated DIO	8x DIO (4x DI, 4x DO)	
Audio	1x Mic-in , 1x Speaker-out	
Remote Power On_Off / Reset	1 / 1	
External FAN Connector	-	
Storage 2.5" HDD/SSD Drive Bay	1	
mSATA	-	
CFast	1	
Expansion CDS Interface	1	
CFM / CMI Interface	0 / 0	
PCI / PCIe	-	
Mini PCI Express	1	
M.2	-	
Universal I/O Bracket	-	2
SIM Socket	1	
Antenna Holes	2	
Other	-	
Power Requirement Power Input Voltage	AT/ATX, 9-48 VDC	
Physical Dimension (WxDxH)	510 x 389.3 x 72 mm	510 x 389.3 x 94.85 mm
Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)	
Operating System Windows	Windows 10 , Windows 8.1 , Windows 7	
Environment Operating Temp.	-20°C to 70°C	
Shock	15 Grms, According to IEC60068-2-27	
Vibration	1.5 Grms, According to IEC60068-2-64	
Front Panel Protection	IP65 Compliant	
EMC	CE, FCC Class A	
Safety	-	

CV-100 / M1000 series

Industrial Monitor

- 8.4" to 24" TFT-LCD with 5-wire Resistive, P-Cap Touch or Glass Only
  (Available on Selected Models)
- Signal Input: VGA, DVI-D and DisplayPort
- Rugged Aluminum Die-cast Front Bezel with IP65 Front Panel Protection
- Wide Range Power Input (9 to 48 VDC)
- Supports Panel / VESA / *Rack Mounting (*with optional mounting kit)

The Cincoze industrial monitors provide a wide selection of display sizes from 8.4" to 24" with an aspect ratio of 4:3 and 16:9, and selected touch type.

Full Spectrum Selection

CV-100/M1000 provides a full-range selection of display size (8.4"-24" TFT-LCD) and various configurations such as 4:3 or 16:9 aspect ratios and multi-point projected capacitive or single-point resistive touchscreen to match with field application usage.

Easy Maintenance

Cincoze's modular plug-and-play design allows easy on-site replacement of the display module, which reduces downtime and maintenance costs. It also protects corporate's investment for future upgradability.

Multiple Video Input

CV-100/M1000 supports both digital and analog video input via three types of display interface: VGA, DVI-D, and DisplayPort. A touchscreen can be connected with a USB or COM port.

Specifications

Model Name	CV-108/M1001		CV-110/M1001	
Model No.	CV-108R/M1001	CV-108C/M1001	CV-110R/M1001	CV-110C/M1001
Display LCD Size	8.4" TFT-LCD		10.4" TFT-LCD	
Max. Resolution	800 x 600		800 x 600	
Brightness (cd/m2)	400		400	
Backlight MTBF	30,000 hrs (LED Backlight)		70,000 hrs (LED Backlight)	
Touch Resistive 5-wire	V	-	V	-
Projected Capacitive	-	V	-	V
System Video Output	1x VGA 1x DVI-D 1x DisplayPort			
Touch Connection	1x USB2.0 1x COM			
Audio	1x Line-in			
Power Button	1			
OSD Function	LCD On/Off, Auto, Menu, Brightness Up, Brightness Down			
Internal Speaker	AMP 5W + 5W			
Power Requirement Power Input Voltage	9-48 VDC			
Physical Dimension (WxDxH)	262 x 186 x 66 mm		295 x 227.3 x 66 mm	
Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)			
Environment Operating Temp.	-5℃ to 60℃			
Shock	15 Grms, According to IEC60068-2-27			
Vibration	1.5 Grms, According to IEC60068-2-64			
Front Panel Protection	IP65 Compliant			
EMC	CE, FCC Class A			
Safety	-			

Specifications

Model Name	CV-110H/M1001	
Model No.	CV-110HR/M1001	CV-110HC/M1001
Display LCD Size	10.4" TFT-LCD	
Max. Resolution	1024 x 768	
Brightness (cd/m2)	400	
Backlight MTBF	50,000 hrs (LED Backlight)	
Touch Resistive 5-wire	V	-
Projected Capacitive	-	V
System Video Output	1x VGA 1x DVI-D 1x DisplayPort	
Touch Connection	1x USB2.0 1x COM	
Audio	1x Line-in	
Power Button	1	
OSD Function	LCD On/Off, Auto, Menu, Brightness Up, Brightness Down	
Internal Speaker	AMP 5W + 5W	
Power Requirement Power Input Voltage	9-48 VDC	
Physical Dimension (WxDxH)	295 x 227.3 x 66 mm	
Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)	
Environment Operating Temp.	-5℃ to 60℃	
Shock	15 Grms, According to IEC60068-2-27	
Vibration	1.5 Grms, According to IEC60068-2-64	
Front Panel Protection	IP65 Compliant	
EMC	CE, FCC Class A	
Safety	-	

Specifications

Model Name	CV-112H/M1001		CV-115/M1001	
Model No.	CV-112HR/M1001	CV-112HC/M1001	CV-115R/M1001	CV-115C/M1001
Display — LCD Size	12.1" TFT-LCD		15" TFT-LCD	
Display — Max. Resolution	1024 x 768		1024 x 768	
Display — Brightness (cd/m2)	500		350	
Display — Backlight MTBF	30,000 hrs (LED Backlight)		50,000 hrs (LED Backlight)	
Touch — Resistive 5-wire	V	-	V	-
Touch — Projected Capacitive	-	V	-	V
System — Video Output	1x VGA 1x DVI-D 1x DisplayPort			
System — Touch Connection	1x USB2.0 1x COM			
System — Audio	1x Line-in			
System — Power Button	1			
System — OSD Function	LCD On/Off, Auto, Menu, Brightness Up, Brightness Down			
System — Internal Speaker	AMP 5W + 5W			
Power Requirement — Power Input Voltage	9-48 VDC			
Physical — Dimension (WxDxH)	345 x 265.3 x 66.5 mm		408 x 312.4 x 69 mm	
Physical — Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)			
Environment — Operating Temp.	-5°C to 60°C			
Environment — Shock	15 Grms, According to IEC60068-2-27			
Environment — Vibration	1.5 Grms, According to IEC60068-2-64			
Environment — Front Panel Protection	IP65 Compliant			
Environment — EMC	CE, FCC Class A			
Environment — Safety	-			

Specifications

Model Name	CV-117/M1001		
Model No.	CV-117R/M1001	CV-117C/M1001	CV-117G/M1001
Display LCD Size	17" TFT-LCD		
Max. Resolution	1280 x 1024		
Brightness (cd/m2)	350		
Backlight MTBF	50,000 hrs (LED Backlight)		
Touch Resistive 5-wire	V	-	-
Projected Capacitive	-	V	-
System Video Output	1x VGA 1x DVI-D 1x DisplayPort		
Touch Connection	1x USB2.0 1x COM		
Audio	1x Line-in		
Power Button	1		
OSD Function	LCD On/Off, Auto, Menu, Brightness Up, Brightness Down		
Internal Speaker	AMP 5W + 5W		
Power Requirement Power Input Voltage	9-48 VDC		
Physical Dimension (WxDxH)	450 x 350 x 73 mm		
Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)		
Environment Operating Temp.	-5℃ to 60℃		
Shock	15 Grms, According to IEC60068-2-27		
Vibration	1.5 Grms, According to IEC60068-2-64		
Front Panel Protection	IP65 Compliant		
EMC	CE, FCC Class A		
Safety	-		

Specifications

Model Name	CV-119/M1001		
Model No.	CV-119R/M1001	CV-119C/M1001	CV-119G/M1001
Display LCD Size	19" TFT-LCD		
Max. Resolution	1280 x 1024		
Brightness (cd/m2)	350		
Backlight MTBF	50,000 hrs (LED Backlight)		
Touch Resistive 5-wire	V	-	-
Projected Capacitive	-	V	-
System Video Output	1x VGA 1x DVI-D 1x DisplayPort		
Touch Connection	1x USB2.0 1x COM		
Audio	1x Line-in		
Power Button	1		
OSD Function	LCD On/Off, Auto, Menu, Brightness Up, Brightness Down		
Internal Speaker	AMP 5W + 5W		
Power Requirement Power Input Voltage	9-48 VDC		
Physical Dimension (WxDxH)	510 x 389.3 x 73 mm		
Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)		
Environment Operating Temp.	-5°C to 60°C		
Shock	15 Grms, According to IEC60068-2-27		
Vibration	1.5 Grms, According to IEC60068-2-64		
Front Panel Protection	IP65 Compliant		
EMC	CE, FCC Class A		
Safety	-		

Specifications

Model Name	CV-W115/M1001	
Model No.	CV-W115R/M1001	CV-W115C/M1001
Display LCD Size	15.6" TFT-LCD	
Display Max. Resolution	1366 x 768	
Display Brightness (cd/m2)	400	
Display Backlight MTBF	50,000 hrs (LED Backlight)	
Touch Resistive 5-wire	V	-
Touch Projected Capacitive	-	V
System Video Output	1x VGA 1x DVI-D 1x DisplayPort	
System Touch Connection	1x USB2.0 1x COM	
System Audio	1x Line-in	
System Power Button	1	
System OSD Function	LCD On/Off, Auto, Menu, Brightness Up, Brightness Down	
System Internal Speaker	AMP 5W + 5W	
Power Requirement Power Input Voltage	9-48 VDC	
Physical Dimension (WxDxH)	420 x 254 x 76 mm	
Physical Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)	
Environment Operating Temp.	-5℃ to 60℃	
Environment Shock	15 Grms, According to IEC60068-2-27	
Environment Vibration	1.5 Grms, According to IEC60068-2-64	
Environment Front Panel Protection	IP65 Compliant	
Environment EMC	CE, FCC Class A	
Environment Safety	-	

Specifications

Model Name	CV-W121/M1001		
Model No.	CV-W121R/M1001	CV-W121C/M1001	CV-W121G/M1001
Display LCD Size	21.5" TFT-LCD		
Max. Resolution	1920 x 1080		
Brightness (cd/m2)	300		
Backlight MTBF	50,000 hrs (LED Backlight)		
Touch Resistive 5-wire	V	-	-
Projected Capacitive	-	V	-
System Video Output	1x VGA 1x DVI-D 1x DisplayPort		
Touch Connection	1x USB2.0 1x COM		
Audio	1x Line-in		
Power Button	1		
OSD Function	LCD On/Off, Auto, Menu, Brightness Up, Brightness Down		
Internal Speaker	AMP 5W + 5W		
Power Requirement Power Input Voltage	9-48 VDC		
Physical Dimension (WxDxH)	550 x 330.5 x 73 mm		
Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)		
Environment Operating Temp.	-5°C to 60°C		
Shock	15 Grms, According to IEC60068-2-27		
Vibration	1.5 Grms, According to IEC60068-2-64		
Front Panel Protection	IP65 Compliant		
EMC	CE, FCC Class A		
Safety	-		

Specifications

Model Name	CV-W124/M1001		
Model No.	CV-W124R/M1001	CV-W124C/M1001	CV-W124G/M1001
Display — LCD Size	24" TFT-LCD		
Max. Resolution	1920 x 1080		
Brightness (cd/m2)	300		
Backlight MTBF	50,000 hrs (LED Backlight)		
Touch — Resistive 5-wire	V	-	-
Projected Capacitive	-	V	-
System — Video Output	1x VGA 1x DVI-D 1x DisplayPort		
Touch Connection	1x USB2.0 1x COM		
Audio	1x Line-in		
Power Button	1		
OSD Function	LCD On/Off, Auto, Menu, Brightness Up, Brightness Down		
Internal Speaker	AMP 5W + 5W		
Power Requirement — Power Input Voltage	9-48 VDC		
Physical — Dimension (WxDxH)	605 x 373 x 73 mm		
Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)		
Environment — Operating Temp.	-5℃ to 60℃		
Shock	15 Grms, According to IEC60068-2-27		
Vibration	1.5 Grms, According to IEC60068-2-64		
Front Panel Protection	IP65 Compliant		
EMC	CE, FCC Class A		
Safety	-		

CS-100 / M1000 series

Sunlight Readable Industrial Monitor

- 8.4" to 21.5" TFT-LCD with Ultra High Brightness
- Signal Input: VGA, DVI-D and DisplayPort
- Ultra High Brightness up to 1,600 nits
- Rugged Aluminum Die-cast Front Bezel with IP65 Front Panel Protection
- Wide Range Power Input (9 to 48 VDC)
- Supports Panel / VESA / *Rack Mounting (*with optional mounting kit)

CS-100/M1000 series is the sunlight readable monitor with projected capacitive touch screen. It offers resolution up to 1920 x 1080 (Full-HD) and high brightness up to 1,600 nits. With rugged aluminum die-cast front bezel and IP65 front panel protection. CS-100/M1000 series is a rugged and reliable solution for an outdoor environment.

Sunlight Readable

Ultra-high brightness for daylight readability makes the CS-100/M1000 series suitable for all lighting conditions, including direct sunlight.

Normal Panel PC   Cincoze Sunlight Readable Panel PC

Full Spectrum

A wide selection of display sizes is available from 8.4" to 21.5". Choose the ideal model from a comprehensive range of options for a variety of applications.

Multiple Video Input

CS-100/M1000 supports both digital and analog video input via three types of display interface: VGA, DVI-D, and DisplayPort. A touchscreen can be connected with a USB or COM port.

Specifications

Model Name	CS-108/ M1001	CS-110H/ M1001	CS-112H/ M1001
Model No.	CS-108C/M1001	CS-110HC/M1001	CS-112HC/M1001
Display LCD Size	8.4" TFT-LCD	10.4" TFT-LCD	12.1" TFT-LCD
Max. Resolution	800 x 600	1024 x 768	1024 x 768
Brightness (cd/m2)	1,600	1,500	1,500
Backlight MTBF	50,000 hrs (LED Backlight)	50,000 hrs (LED Backlight)	30,000 hrs (LED Backlight)
Touch Resistive 5-wire	-	-	-
Projected Capacitive	V	V	V
System Video Output	1x VGA 1x DVI-D 1x DisplayPort		
Touch Connection	1x USB2.0 1x COM (Resistive Touch)		
Audio	1x Line-in		
Power Button	1		
OSD Function	LCD On/Off, Auto, Menu, Brightness Up, Brightness Down		
Internal Speaker	AMP 5W + 5W		
Power Requirement Power Input Voltage	9-48 VDC		
Physical Dimension (WxDxH)	262 x 186 x 66 mm	295 x 227.3 x 66 mm	345 x 265.3 x 66.5 mm
Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)		
Environment Operating Temp.	-5℃ to 60℃		
Shock	15 Grms, According to IEC60068-2-27		
Vibration	1.5 Grms, According to IEC60068-2-64		
Front Panel Protection	IP65 Compliant		
EMC	CE, FCC Class A		
Safety	-		

Specifications

Model Name	CS-115/ M1001	CS-117/ M1001	CS-119/ M1001
Model No.	CS-115C/M1001	CS-117C/M1001	CS-119C/M1001
Display LCD Size	15" TFT-LCD	17" TFT-LCD	19" TFT-LCD
Max. Resolution	1024 x 768	1280 x 1024	1280 x 1024
Brightness (cd/m2)	1,600	1,500	1,600
Backlight MTBF	50,000 hrs (LED Backlight)	50,000 hrs (LED Backlight)	50,000 hrs (LED Backlight)
Touch Resistive 5-wire	-	-	-
Projected Capacitive	V	V	V
System Video Output	1x VGA 1x DVI-D 1x DisplayPort		
Touch Connection	1x USB2.0 1x COM (Resistive Touch)		
Audio	1x Line-in		
Power Button	1		
OSD Function	LCD On/Off, Auto, Menu, Brightness Up, Brightness Down		
Internal Speaker	AMP 5W + 5W		
Power Requirement Power Input Voltage	9-48 VDC		
Physical Dimension (WxDxH)	408 x 312.4 x 69 mm	450 x 350 x 73 mm	510 x 389.3 x 73 mm
Mounting	Panel / VESA / *Rack Mounting (*with optional mounting kit)		
Environment Operating Temp.	-5℃ to 60℃		
Shock	15 Grms, According to IEC60068-2-27		
Vibration	1.5 Grms, According to IEC60068-2-64		
Front Panel Protection	IP65 Compliant		
EMC	CE, FCC Class A		
Safety	-		

P2000 series / P1000 series / M1000 series
CV-100 series / CS-100 series

Convertible Embedded System

Cincoze convertible embedded system includes a display module, computer module, and monitor module. With Cincoze patented CDS technology, these modules can be configured to a panel PC or touch monitor to fulfill the needs of a wide range of applications.

Cincoze computer modules "P1000 series" and "P2000 series" are designed to be positioned as "One Computer, Two Appliances". These modules can be used not only as a computer module for an industrial panel PC, but also as a standalone embedded computer.

P2000 series
High-Performance Convertible Computer

Cincoze P2000 series are high-performance, fanless embedded computers powered by an Intel® Core™ U-series processor and support for three independent displays. P2000 series adopts Control Function Module (CFM) technology which allows you to extend PoE and power ignition sensing (IGN) functions with additional modules. P2000 series also acts as an engine of panel PC for the CV-100/CS-100 series.

The P2000 series is truly a rugged computer supporting wide operating temperatures from -40°C to 70°C, high tolerance of shock and vibration, various kinds of industrial-grade protection, and an integrated SuperCap for CMOS battery maintenance-free operation. These features allow the P2000 series to be deployed in industrial environments and critical applications.

P2102E

P1000 series
Power Efficient Convertible Computer

Powered by an Intel® Atom®/Pentium® processor, the P1000 series are slim embedded computers with Convertible Display System (CDS) technology and perfect for space-constrained environments. Not only robust, but also easy to maintenance, the P1000 computer is well-suited for industrial applications, such as industrial automation, machinery, surveillance, and transportation.

P1101

M1000 series
Convertible Monitor Module

M1000 is a monitor module that supports Convertible Display Systems (CDS) technology and is compatible with Cincoze display modules for different display sizes and touch types. M1000 offers three types of display interface input: VGA, DVI-D, and DisplayPort. In addition, it has an OSD function for adjusting the viewing options of the display and supports 1x USB and 1x COM ports for touch screen signal connectivity.

Moreover, the M1000 series supports a wide range of DC power input from 9 to 48 VDC. With Cincoze display modules, it can be deployed as an industrial monitor for various applications.

M1001

CV-100 series
Convertible Display Module

CV-100 series is convertible display module with a resistive 5-wire/ projected capacitive touch screen. It offers resolution up to 1920 x 1080 (Full HD). CV-100 series features a flat surface and IP65 dust/ waterproof front panel. In addition, designed with a die-cast aluminum front frame, it is rugged and reliable for industrial applications and harsh environments.

CS-100 series
Sunlight Readable Convertible Display Module

CS-100 series is the sunlight readable display module with a projected capacitive touch screen. It offers resolution up to 1920 x 1080 (Full-HD) and high brightness up to 1,600 nits. With an IP65 rating of front panel and also aluminum die-cast front frame, the CS-100 series are rugged and reliable for outdoor applications.

Specifications

Model Name	P2102	P2102E
Model No.	P2102-i5 P2102-i3	P2102E-i5 P2102E-i3

		P2102	P2102E
System	Processor	Intel® Core™ i5-8365UE Intel® Core™ i3-8145UE	
	Chipset	SoC	
	Memory	2x DDR4, Up to 64GB	
I/O Interface	Video Output	1x VGA 1x DisplayPort 1x CDS	
	LAN	2x GbE LAN	
	PoE+	Optional: 2x PoE+	
	Serial Port	4x RS-232/422/485	
	USB	3x USB3.2 2x USB2.0	
	Isolated DIO	16x DIO (8x DI, 8x DO)	
	Audio	1x Mic-in 1x Speaker-out	
	Remote Power On_Off / Reset	1 / 1	
	External FAN Connector	-	
Storage	2.5" HDD/SSD Drive Bay	2	
	mSATA	-	
	CFast	-	
Expansion	CDS Interface	1	
	CFM / CMI Interface	2 / 0	
	PCI / PCIe	-	Optional: 1x PCI or 1x PCIex4
	Mini PCI Express	2	
	M.2	1x M.2 2230 E Key	
	Universal I/O Bracket	-	2
	SIM Socket	1	
	Antenna Holes	4	
	Other	Power Ignition Sensing (IGN) Function	
Power Requirement	Power Input Voltage	AT/ATX, 9-48 VDC	
Physical	Dimension (WxDxH)	254.5 x 190 x 41.5mm	254.5 x 190 x 61mm
	Mounting	Wall / VESA / CDS / DIN Rail Mounting	
Operating System	Windows	Windows 10	
Environment	Operating Temp.	-40℃ to 70℃	
	Shock	50 Grms, According to IEC60068-2-27	
	Vibration	5 Grms, According to IEC60068-2-64	
	EMC	CE, FCC Class A	
	Safety	EN62368-1	

Specifications

Model Name	P2002	P2002E		
Model No.	P2002-i5 P2002-i3	P2002E-i5 P2002E-i3	P2002E-i5-E4 P2002E-i3-E4	P2002E-i5-PI P2002E-i3-PI
System — Processor	Intel® Core™ i5-6300U Intel® Core™ i3-6100U			
System — Chipset	SoC			
System — Memory	2x DDR4, Up to 32GB			
I/O Interface — Video Output	1x VGA 1x DVI-D 1x CDS			
I/O Interface — LAN	2x GbE LAN			
I/O Interface — PoE+	Optional: 2x PoE+			
I/O Interface — Serial Port	6x RS-232/422/485			
I/O Interface — USB	4x USB3.2 1x USB2.0			
I/O Interface — Isolated DIO	16x DIO (8x DI, 8x DO)			
I/O Interface — Audio	1x Mic-in 1x Speaker-out			
I/O Interface — Remote Power On_Off / Reset	1 / 1			
I/O Interface — External FAN Connector	1			
Storage — 2.5" HDD/SSD Drive Bay	2			
Storage — mSATA	2			
Storage — CFast	1			
Expansion — CDS Interface	1			
Expansion — CFM / CMI Interface	2 / 0			
Expansion — PCI / PCIe	-	Optional: 1x PCI or 1x PCIex4	1x PCIex4	1x PCI
Expansion — Mini PCI Express	2			
Expansion — M.2	-			
Expansion — Universal I/O Bracket	1			
Expansion — SIM Socket	1			
Expansion — Antenna Holes	4			
Expansion — Other	Power Ignition Sensing (IGN) Function			
Power Requirement — Power Input Voltage	AT/ATX, 9-48 VDC			
Physical — Dimension (WxDxH)	254.5 x 220 x 54 mm	254.5 x 220 x 72 mm		
Physical — Mounting	Wall / VESA / CDS Mounting			
Operating System — Windows	Windows 10 Windows 8.1 Windows 7			
Environment — Operating Temp.	-25°C to 70°C			
Environment — Shock	50 Grms, According to IEC60068-2-27			
Environment — Vibration	5 Grms, According to IEC60068-2-64			
Environment — EMC	CE, FCC Class A			
Environment — Safety	-			

Specifications

Model Name	P1101
Model No.	P1101-E50 P1101-N42

System	Processor	Intel® Atom® x7-E3950 Intel® Pentium® N4200
	Chipset	SoC
	Memory	1x DDR3L, Up to 8GB
I/O Interface	Video Output	1x VGA 1x DisplayPort 1x CDS
	LAN	2x GbE LAN
	PoE+	Optional: 2x PoE+
	Serial Port	4x RS-232/422/485
	USB	4x USB3.0
	Isolated DIO	8x DIO (4x DI, 4x DO)
	Audio	1x Mic-in 1x Speaker-out
	Remote Power On_Off / Reset	1 / 1
	External FAN Connector	-
Storage	2.5" HDD/SSD Drive Bay	1
	mSATA	1
	CFast	-
Expansion	CDS Interface	1
	CFM / CMI Interface	2 / 0
	PCI / PCIe	-
	Mini PCI Express	2
	M.2	-
	Universal I/O Bracket	-
	SIM Socket	1
	Antenna Holes	4
	Other	Power Ignition Sensing (IGN) Function
Power Requirement	Power Input Voltage	AT/ATX, 9-48 VDC
Physical	Dimension (WxDxH)	204.5 x 149 x 41.5 mm
	Mounting	Wall / VESA / CDS / DIN Rail Mounting
Operating System	Windows	Windows 10
Environment	Operating Temp.	-40°C to 70°C
	Shock	50 Grms, According to IEC60068-2-27
	Vibration	5 Grms, According to IEC60068-2-64
	EMC	CE, FCC Class A
	Safety	EN62368-1

Specifications

Model Name	P1001	P1001E
Model No.	P1001	P1001E

System	Processor	Intel® Atom™ E3845	
	Chipset	SoC	
	Memory	1x DDR3L, Up to 8GB	
I/O Interface	Video Output	1x VGA 1x DisplayPort 1x CDS	
	LAN	2x GbE LAN	
	PoE+	-	
	Serial Port	2x RS-232/422/485	
	USB	1x USB3.0 3x USB2.0	
	Isolated DIO	8x DIO (4x DI, 4x DO)	
	Audio	1x Mic-in 1x Speaker-out	
	Remote Power On_Off / Reset	1 / 1	
	External FAN Connector	-	
Storage	2.5" HDD/SSD Drive Bay	1	
	mSATA	-	
	CFast	1	
Expansion	CDS Interface	1	
	CFM / CMI Interface	0 / 0	
	PCI / PCIe	-	
	Mini PCI Express	1	
	M.2	-	
	Universal I/O Bracket	-	2
	SIM Socket	1	
	Antenna Holes	2	
	Other	-	
Power Requirement	Power Input Voltage	AT/ATX, 9-48 VDC	
Physical	Dimension (WxDxH)	204.5 x 149 x 37.5 mm	204.5 x 150 x 60 mm
	Mounting	Wall / VESA / CDS Mounting	
Operating System	Windows	Windows 10 Windows 8.1 Windows 7	
Environment	Operating Temp.	-20°C to 70°C	
	Shock	50 Grms, According to IEC60068-2-27	
	Vibration	5 Grms, According to IEC60068-2-64	
	EMC	CE, FCC Class A	
	Safety	-	

Specifications

Model Name	M1001
Model No.	M1001
System — Video Output	1x VGA 1x DVI-D 1x DisplayPort
System — Touch Connection	1x USB2.0 1x COM (Resistive Touch)
System — Audio	1x Line-in
System — Power Button	1x Power On/Off Button
Other Features — OSD Function	LCD On/Off, Auto, Menu, Brightness Up, Brightness Down
Other Features — Internal Speaker	AMP 5W + 5W
Power Requirement — Power Input Voltage	9-48 VDC
Physical — Dimension (WxDxH)	204.5 x 149 x 38.5 mm
Environment — Operating Temp.	-5℃ to 60℃
Environment — Relative Humidity	10%-95% (non-condensing)
Environment — EMC	CE, FCC Class A
Environment — Safety	-

Specifications

Model Name	CV-108		CV-110	
Model No.	CV-108R	CV-108C	CV-110R	CV-110C
Display — LCD Size	8.4" TFT-LCD		10.4" TFT-LCD	
Max. Resolution	800 x 600		800 x 600	
Brightness (cd/m2)	400		400	
Backlight MTBF	30,000 hrs (LED Backlight)		70,000 hrs (LED Backlight)	
Touch — Resistive 5-wire	V	-	V	-
Projected Capacitive	-	V	-	V
Physical — Dimension (WxDxH)	262 x 186.2 x 56.2 mm		295 x 227.3 x 56.2 mm	
Environment — Resistive 5-wire	-20°C to 70°C		-20°C to 75°C	-10°C to 70°C
Projected Capacitive	IP 65 Compliant		IP 65 Compliant	
EMC	CE, FCC Class A		CE, FCC Class A	
Safety	-		-	

Specifications

Model Name	CV-110H	
Model No.	CV-110HR	CV-110HC
Display — LCD Size	10.4" TFT-LCD	
Max. Resolution	1024 x 768	
Brightness (cd/m2)	400	
Backlight MTBF	50,000 hrs (LED Backlight)	
Touch — Resistive 5-wire	V	-
Projected Capacitive	-	V
Physical — Dimension (WxDxH)	295 x 227.3 x 56.2 mm	
Environment — Resistive 5-wire	-20°C to 75°C	-10°C to 70°C
Projected Capacitive	IP 65 Compliant	
EMC	CE, FCC Class A	
Safety	-	

Specifications

Model Name	CV-112H		CV-115	
Model No.	CV-112HR	CV-112HC	CV-115R	CV-115C
Display — LCD Size	12.1" TFT-LCD		15" TFT-LCD	
Display — Max. Resolution	1024 x 768		1024 x 768	
Display — Brightness (cd/m2)	500		350	
Display — Backlight MTBF	30,000 hrs (LED Backlight)		50,000 hrs (LED Backlight)	
Touch — Resistive 5-wire	V	-	V	-
Touch — Projected Capacitive	-	V	-	V
Physical — Dimension (WxDxH)	345 x 265.3 x 57 mm		408 x 312.4 x 59.2 mm	
Environment — Resistive 5-wire	-20℃ to 75℃		0℃ to 65℃	
Environment — Projected Capacitive	IP 65 Compliant		IP 65 Compliant	
Environment — EMC	CE, FCC Class A		CE, FCC Class A	
Environment — Safety	-		-	

Specifications

Model Name	CV-117		
Model No.	CV-117R	CV-117C	CV-117G
Display — LCD Size	17" TFT-LCD		
Display — Max. Resolution	1280 x 1024		
Display — Brightness (cd/m2)	350		
Display — Backlight MTBF	50,000 hrs (LED Backlight)		
Touch — Resistive 5-wire	V	-	-
Touch — Projected Capacitive	-	V	-
Physical — Dimension (WxDxH)	450 x 350 x 63.2 mm		
Environment — Resistive 5-wire	-20℃ to 75℃	-20℃ to 80℃	-30℃ to 85℃
Environment — Projected Capacitive	IP 65 Compliant		
Environment — EMC	CE, FCC Class A		
Environment — Safety	-		

Specifications

Model Name	CV-119		
Model No.	CV-119R	CV-119C	CV-119G
Display — LCD Size	19" TFT-LCD		
Display — Max. Resolution	1280 x 1024		
Display — Brightness (cd/m2)	350		
Display — Backlight MTBF	50,000 hrs (LED Backlight)		
Touch — Resistive 5-wire	V	-	-
Touch — Projected Capacitive	-	V	-
Physical — Dimension (WxDxH)	510 x 389.3 x 63.2 mm		
Environment — Resistive 5-wire	0℃ to 50℃		
Environment — Projected Capacitive	IP 65 Compliant		
Environment — EMC	CE, FCC Class A		
Environment — Safety	-		

Specifications

Model Name	CV-W115	
Model No.	CV-W115R	CV-W115C
Display — LCD Size	15.6" TFT-LCD	
Display — Max. Resolution	1366 x 768	
Display — Brightness (cd/m2)	400	
Display — Backlight MTBF	50,000 hrs (LED Backlight)	
Touch — Resistive 5-wire	V	-
Touch — Projected Capacitive	-	V
Physical — Dimension (WxDxH)	420 x 254 x 66.2 mm	
Environment — Resistive 5-wire	0℃ to 60℃	
Environment — Projected Capacitive	IP 65 Compliant	
Environment — EMC	CE, FCC Class A	
Environment — Safety	-	

Specifications

Model Name	CV-W121		
Model No.	CV-W121R	CV-W121C	CV-W121G
Display LCD Size	21.5" TFT-LCD		
Max. Resolution	1920 x 1080		
Brightness (cd/m2)	300		
Backlight MTBF	50,000 hrs (LED Backlight)		
Touch Resistive 5-wire	V	-	-
Projected Capacitive	-	V	-
Physical Dimension (WxDxH)	550 x 330.5 x 63.2 mm		
Environment Resistive 5-wire	0℃ to 60℃		
Projected Capacitive	IP 65 Compliant		
EMC	CE, FCC Class A		
Safety	-		

Specifications

Model Name	CV-W124		
Model No.	CV-W124R	CV-W124C	CV-W124G
Display LCD Size	24" TFT-LCD		
Max. Resolution	1920 x 1080		
Brightness (cd/m2)	300		
Backlight MTBF	50,000 hrs (LED Backlight)		
Touch Resistive 5-wire	V	-	-
Projected Capacitive	-	V	-
Physical Dimension (WxDxH)	605 x 373 x 63.2 mm		
Environment Resistive 5-wire	-10℃ to 60℃	-20℃ to 70℃	
Projected Capacitive	IP 65 Compliant		
EMC	CE, FCC Class A		
Safety	-		

Specifications

Model Name	CS-108	CS-110H	CS-112H
Model No.	CS-108C	CS-110HC	CS-112HC
Display LCD Size	8.4" TFT-LCD	10.4" TFT-LCD	12.1" TFT-LCD
Max. Resolution	800 x 600	1024 x 768	1024 x 768
Brightness (cd/m2)	1,600	1,500	1,500
Backlight MTBF	50,000 hrs (LED Backlight)	50,000 hrs (LED Backlight)	30,000 hrs (LED Backlight)
Touch Resistive 5-wire	-	-	-
Projected Capacitive	V	V	V
Physical Dimension (WxDxH)	262 x 186.2 x 56.2 mm	295 x 227.3 x 56.2 mm	345 x 265.3 x 57 mm
Environment Resistive 5-wire	-20℃ to 70℃	-20℃ to 70℃	-20℃ to 70℃
Projected Capacitive	IP 65 Compliant	IP 65 Compliant	IP 65 Compliant
EMC	CE, FCC Class A	CE, FCC Class A	CE, FCC Class A
Safety	-	-	-

Specifications

Model Name	CS-115	CS-117	CS-119
Model No.	CS-115C	CS-117C	CS-119C
Display LCD Size	15" TFT-LCD	17" TFT-LCD	19" TFT-LCD
Max. Resolution	1024 x 768	1280 x 1024	1280 x 1024
Brightness (cd/m2)	1,600	1,500	1,600
Backlight MTBF	50,000 hrs (LED Backlight)	50,000 hrs (LED Backlight)	50,000 hrs (LED Backlight)
Touch Resistive 5-wire	-	-	-
Projected Capacitive	V	V	V
Physical Dimension (WxDxH)	408 x 312.4 x 59.2 mm	450 x 350 x 63.2 mm	510 x 389.3 x 63.2 mm
Environment Resistive 5-wire	-20℃ to 70℃	-20℃ to 70℃	-20℃ to 70℃
Projected Capacitive	IP 65 Compliant	IP 65 Compliant	IP 65 Compliant
EMC	CE, FCC Class A	CE, FCC Class A	CE, FCC Class A
Safety	-	-	-

GOLD Product Line
Embedded GPU Computer

Extreme GPU Computing

With its thousands of GPU cores, Cincoze rugged GPU computer performs a large number of parallel computing and supports Intel® latest workstation-grade CPU to meet the demands of high performance computing applications, such as autonomous vehicles, machine vision, real-time face recognition, and deep learning.

Outstanding System Design

To meet a wide range of applications on the market, Cincoze has designed an unprecedented system that can accommodate two full-length GPU cards up to 328mm simultaneously and built with high power budget. The modularized expansion box provides the flexibility of use and convenience of maintenance.

Excellent Field Adaptability

To adapt to different environments, our rugged GPU computers offer a variety of mounting methods, such as face-up, wall-mount, desktop, and rack-mount. It can also bear severe vibration, strong impact, and temperature changes in harsh environments.

Comprehensive GPU Solution

Cincoze GPU solution supports SoM's GPU modules, mobile architecture MXM modules, desktop architecture PCI/PCIe expansion cards, and compact to expandable products. Our complete product line can fully meet specific performance and application requirements.

To fulfill the demands of growing advanced industrial applications, embedded computers are increasingly relying on heterogeneous platforms that take advantage of different types of processing units such as CPUs and GPUs. CPUs execute multi-task operations through serial processing, and multiple processing cores with high clock speed are now standard in high-end computing. GPUs have hundreds or thousands of small cores focusing on a specific task in massively parallel processing, such as image processing and data analysis. Today, it's getting popular to use the combination of CPU and GPU to fulfill specific industrial applications like face recognition, video surveillance, autonomous drive, automated optical inspection, machine learning, and other edge AI computing.

Cincoze's GPU computers provide powerful computing performance and support various form factors of GPU expansion cards such as Mobile PCI Express Module (MXM), PCIe and even full-length PCIe. Built with a high power budget with optimized thermal design, these GPU computers can operate correctly even under 100% loading of CPU and GPU. Together with its rugged design and compliance with industry certifications, Cincoze's GPU computers can be used in harsh environments.

GM-1000 series
Embedded MXM GPU Computer

GP-3000 series
Dual Full-length GPU Expandable Computer

GM-1000 series

Embedded MXM GPU Computer

- Supports Intel® Xeon®/Core™ Processor
- Supports 1x MXM 3.1 Type A/B form factor GPU module expansion
- 2x DDR4 SO-DIMM sockets, up to 2666MHz, 64GB
- Supports wide operating temperature (-40°C - 70°C) and vibration/shock tolerance (5G/50G)
- 260 x 200 x 85 mm compact footprint
- Flexible functionality expansions:
  - M.2 E key (CNVi), full-size Mini-PCIe and M.2 M Key (NVMe SSD)
  - Proprietary CMI interface for various I/O expandability
  - Proprietary CFM interface for PoE+ or Power Ignition Sensing (IGN)
- E-Mark, EN50155 (EN50121-3-2 only)

GM-1000 is a rugged, compact, and high-performance GPU computer with embedded GPU expansion capability. It supports Intel® Xeon®/Core™ socket type processors and Mobile PCI Express Module (MXM 3.1 Type A/B form factor) in a small footprint (260 x 200 x 85 mm). It is ideal for applications requiring high GPU processing power and installed in space-limited environments.

More Powerful & Faster

GM-1000, powered by an Intel® workstation CPU, provides superior processing performance.

MXM
GPU Expansion

GPUs are the key to super-fast image processing. The MXM 3.1 Type A/B expansion slot supports modern MXM GPUs. Standard options are an NVIDIA RTX 3000 (5.3 TFLOPS), Quadro T1000 (2.6 TFLOPS), or Quadro P2000 (2.3 TFLOPS), but upgrades to even faster MXM GPUs (up to 160 W) can further accelerate performance.

Generous 360W
Power Budget

The specialized power design of the GM-1000 provides a 360W power budget that counters the typical limitations of fanless embedded computers. A unique thermal design, combining independent cooling systems for CPU and GPU and extruded aluminum case with integrated copper heat pipes, ensure operational reliability in the field.

360W
Total Power Budget
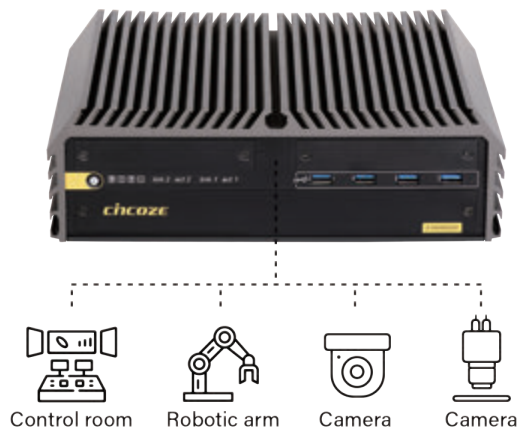
High Speed I/O

High-speed vision cameras require high-speed connections for near-instantaneous data transfer for image processing and analysis. GM-1000 provides high-speed I/O interfaces, including USB3.2 Gen2 and GbE LAN. PoE, additional LAN, and 10GbE are available through proprietary modules.

Control room Robotic arm Camera Camera

Compact Size

The compact GM-1000 is a diminutive 260 x 200 x 85 mm but still includes essential I/O out-the-box, making it a compelling choice for space-constrained applications like robotic arms and AOI equipment.

Industrial Grade
Rugged Design

The GM-1000 can operate in extreme industrial temperatures from -40 to 70°C. It has 50G/5G anti-shock and vibration resistance, wide-range voltage input from 9 to 48 VDC, as well as over-voltage, over-current, and ESD protection for applications in the harshest conditions.

Specifications

Model Name	GM-1000		
Model No.	GM-1000		
System	Processor	Intel® 9th Gen: Xeon Processor, Core i7/i5/i3 Processor Intel® 8th Gen: Xeon Processor, Core i7/i5/i3 Processor, Pentium Processor, Celeron Processor	
	Chipset	Intel® C246	
	Memory	2x DDR4, Up to 64GB	
I/O Interface	Video Output	1x DVI-I 1x DisplayPort 1x HDMI	
	LAN	2x GbE LAN Optional: 2x 10GbE LAN, 4x GbE LAN	
	PoE+	Optional: 4x PoE+	
	Serial Port	4x RS-232/422/485 Optional: 2x RS-232/422/485	
	USB	4x USB 3.2 Gen2 4x USB 3.2 Gen1	
	Optical Isolated DIO	Optional: 16x DIO(8x DI, 8x DO)	
	Audio	1x Line-Out 1x Mic-in	
	Remote Power On_Off / Reset	1 / -	
	External FAN Connector	2	
Storage	2.5" SSD / HDD Bay	2	
	mSATA	3	
Expansion	CFM / CMI Interface	1 / 2	
	Mini PCI Express	3	
	M.2 Socket	1x M.2 E Key, 1x M.2 M Key	
	Universal I/O Bracket	4	
	SIM Socket	2	
	Antenna Holes	2	
	Other	1x MXM Carrier Board Interface for MXM GPU Module Expansion, Power Ignition Sensing (IGN) Function	
Power Requirement	Power Input Voltage	AT/ATX, 9 - 48 VDC	
Physical	Dimension (WxDxH)	260 x 200 x 85 mm	
	Mounting	Wall / Side / DIN Rail / VESA	
Operating System	Windows	Windows 10	
Environment	Operating Temp.	Without MXM GPU Module: 35W CPU: -40℃ - 70℃, 65W CPU: -40℃ - 60℃, 80W CPU: -40℃ - 55℃ With MXM GPU Module (58W): 35W~65W CPU: -40℃ - 55℃, 80W CPU: -40℃ - 50℃	
	Shock	50 Grms, According to IEC60068-2-27	
	Vibration	5 Grms, According to IEC60068-2-64	
	EMC	CE, FCC Class A, EN50155(EN50121-3-2), E-Mark	
	Safety	EN62368-1	

GP-3000 series

Dual Full-length GPU Expandable Computer

- Supports Intel® Xeon®/Core™ workstation-grade Processor (35W / 65W / 80W)
- 2 x DDR4 SO-DIMM Sockets, Supports ECC / non-ECC type up to 2666 MHz, 64GB
- 4 x 2.5" Hot-Swappable SATA III HDD/SSD Bays (Max Height 15 mm)
- 1 x M.2 M Key Socket (NVMe), 1 x M.2 E Key Socket (CNVi)
- 2 x Front Accessible SIM Card Slots for Signal Redundancy
- CMI Technology for Various I/O Module Expansions
- CFM Technology for Power Ignition Sensing (IGN) & PoE Function
- Versatile Mounting Methods (Wall / Stand / 19" Rack Mount)
- Military Standard Shock & Vibration Proof (MIL-STD-810G)
- E-Mark, EN50155 (EN50121-3-2 only)

GP-3000 is an expandable high-performance GPU computer. An Intel® workstation-grade processor and up to two 250W full-length graphic cards provide unparalleled performance within a high power budget. GP-3000 features the unique GPU Expansion Box (GEB) design, whereby a single- or dual-GPU GEB is attached to the main embedded system to add GPU processing power. The additional GPU performance massively accelerates complex industrial AI and machine vision tasks.

GP-3000 is engineered to deliver superior performance, fast data storage, and high-speed I/O connectivity. The combination of high-quality mechanical design and industrial ruggedness (MIL-STD-810G compliance) brings new possibilities and innovative transformations for AI applications at the edge.

Cutting-Edge Performance

The GP-3000 is powered by an Intel® Xeon®/Core™ processor and supports up to two 250W high-end graphics cards adding blazing-fast performance for AI, machine learning, machine vision, and big data analysis. GP-3000 supports two ECC or non-ECC DDR4-2666 (up to 64 GB) for exceptional speed and responsiveness. The GP-3000 is one of the most formidable industrial AI and machine vision computers available today.

Scalability and Upgradability With GEB

The GP-3000 provides an exclusive GPU Expansion Box (GEB), a scalable GPU solution for performance upgradability and flexibility. It supports the expansion of up to two 250W 328mm full-length graphics cards. GP-3000 is the core processing unit, and a single- or dual-GPU GEB connects externally to add GPU processing power and other PCIe add-on cards.

PATENT PENDING

High Power Budget

GP-3000 has a high power budget and supports a wide range of DC power input from 9 to 48 VDC for high-end GPU computing. GP-3000 can power for its GEB with its specialized power design, ideal for dual graphics cards.

Intelligent Cooling Design
for Enhanced Thermal Support

Better performance, higher power requirements. To solve the power consumption and thermal challenges, the GP-3000's mechanical structure and isolated external smart fan kits on both sides of the chassis effectively dissipate heat under full workloads in extreme conditions.

Multiple Native and
Expandable I/O

GP-3000 has multiple native I/O interfaces built-in. Cincoze's proprietary CMI/CFM modules offer customization for additional I/O or other functionality such as GbE LAN, POE, USB 3.2, and 10 GbE LAN. GP-3000 supports four 2.5" hot-swap SATA SSDs and has one M.2 M key socket for NVMe SSD storage.

Robust Design
Enabling Reliable Operation

GP-3000 packs versatility and performance into a robust design for ultimate GPU computing. GP-3000 has passed a series of stringent quality assurance tests and industry standards including MIL-STD-810G military standard, E-mark for in-vehicle applications, and EN50155 (EN50121-3-2 only) for rolling stock environments. It can withstand hot and cold temperature extremes, shock and vibration, and high electromagnetic radiation.

Specifications

Model Name	GP-3000
Model No.	GP-3000

System	Processor	Intel® 9th Gen: Xeon Processor, Core i7/i5/i3 Processor Intel® 8th Gen: Xeon Processor, Core i7/i5/i3 Processor, Pentium Processor, Celeron Processor
	Chipset	Intel® C246
	Memory	2x DDR4, Up to 64GB
I/O Interface	Video Output	1x VGA 1x HDMI 1x DisplayPort
	LAN	5x GbE LAN Optional: 2x 10GbE LAN, 4x GbE LAN
	PoE+	Optional: 4x PoE+
	Serial Port	2x RS-232/422/485 Optional: 2x RS-232/422/485
	USB	2x USB 3.2 Gen2 4x USB 3.2 Gen1
	Optical Isolated DIO	Optional: 16x DIO(8x DI, 8x DO)
	Audio	1x Line-Out 1x Mic-in
	Remote Power On_Off / Reset	1 / 1
	External FAN Connector	-
Storage	2.5" SSD / HDD Bay	4
	mSATA	-
Expansion	CFM / CMI Interface	2 / 2
	PCI / PCIe	Optional: 1x PCIex4 + 1x PCIex16, 2x PCIex16 + 1x PCIex1 + 1x PCIex4
	Mini PCI Express	2
	M.2 Socket	1x M.2 E Key, 1x M.2 M Key
	Universal I/O Bracket	1
	SIM Socket	2
	Antenna Holes	7
	Other	-
Power Requirement	Power Input Voltage	AT/ATX, 9 - 48VDC
Physical	Dimension (WxDxH)	105 x 190 x 360 mm
	Mounting	Wall/ Desktop/ 19" Rack/ Face-up
Operating System	Windows	Windows 10
Environment	Operating Temp.	GP-3000: 35W CPU: -40℃ - 70℃, 65W CPU: -40℃ - 60℃, 80W CPU: -40℃ - 50℃ GP-3000 + 1x 250W GPU Card : -40℃ - 40℃ GP-3000 + 1x 350W GPU Card : -40℃ - 35℃ GP-3000 + 2x 250W GPU Card : -40℃ - 35℃
	Shock	MIL-STD-810G
	Vibration	MIL-STD-810G
	EMC	CE, FCC, ICES-003 Class A, EN50155(EN50121-3-2), E-Mark
	Safety	EN62368-1

Specifications

Model Name	GEB-3301
Model No.	GEB-3301
Expansion Slot	1x PCIex16 Slot for GPU Card 1x PCIex4 Slot
GPU Card Dimension	Card Length : 328 mm Card Height : 64 mm (Standard Triple-Deck) Card Width : 134 mm
Internal USB	1x USB 2.0, Type A
Internal Power Connector	2 x 8-Pin Connector for GPU Card
Total Power Budget	350 W
Weight Information	3.2 kg
Dimension (W x D x H)	104 x 195 x 360 mm
MTBF	2,713,254 hr

Specifications

Model Name	GEB-3601
Model No.	GEB-3601
Expansion Slot	2x PCIex16 Slot (PCIex8 Signal) for GPU Card 1x PCIex4 Slot 1x PCIex1 Slot
GPU Card Dimension	Card Length: 328 mm Card Height: 64 mm (Standard Triple-Deck) Card Width: 134 mm
Internal USB	1x USB 2.0, Type A
Internal Power Connector	4x 8-Pin Connector for GPU Card
Total Power Budget	500 W
Weight Information	5.2 kg
Dimension (W x D x H)	200 x 195 x 360 mm
MTBF	1,661,177 hr

cincoze™