

LED Area Flood Lighting

MAHA-PLUS Series

GigaTera[®]
beyond light

MAH500 / MAH400

Product Description

- Unrivaled efficacy 150 lm/W
- Asymmetric beam enabling cost efficient 1 for 1 replacement for HID flood light
- Outstanding cooling technology and durability
- Excellent light distribution and minimized glare
- Smart lighting control using wireless or Receptacle

Application

- Sporting Facilities
- Airplane Hangars
- Airport Aprons
- Parking Lots
- Harbour / Yard

Certification

- UL
- FCC
- KC
- CB / CE
- DLC



MAHA-PLUS Series (Built-in Driver type) Specifications

Model Name	MAH500	MAH400
Power Consumption	500W	400W
CCT	5000K (5700K / 4000K / 3000K available)	
Luminous Flux *	75,000 lm	60,000 lm
Luminous Efficacy *	150 lm/W	
CRI	80 Ra	
LED Driving Current	104 mA	95 mA
Light Distribution	Asymmetric Wide	
BUG Rating	B3 – U0 – G5	
Input Voltage	220 ~ 240 Vac / 200 ~ 277 Vac	100 ~ 240 Vac / 120 ~ 277 Vac / 347 ~ 480 Vac
Input Current	Max. 3.0A (@200Vac) -	Max. 5.0A (@100Vac) Max. 1.5A (@347Vac)
Power Factor	≥0.9 at Max load	
Frequency	50 / 60 Hz	
Surge Protection	Line – Line 20kV, Line – FG 20kV	
Driver Type	Constant Current (CC)	
Fixture Manufacturer	GigaTera Lighting Inc. / Made in Korea / Made in Vietnam	
Size	mm	475 x 525 x 196
	inch	18.7 x 20.7 x 7.7
Weight	15.0 kg / 33.1 lb	
Material	Body	Cast Aluminum
	Optic	AL Coating Reflector
	Cover	Tempered Glass 4.0T (Clear)
Finish	Powder Coating	
IP Rating	IP66	
Effective Projected Area	Front (ft ² / m ²)	0.763 / 0.071
	Side (ft ² / m ²)	0.684 / 0.064
Operating Temperature	-30°C ~ 50°C	
Option	Control	Wireless (ZigBee) / NEMA-7
	Mounting	Swivel Bracket, Pole Mount Bracket
Operation Life Time	> 60,000 hours (L80B10) at upto Ta 40 °C	
Warranty	5 Years (12 hours usage per day)	

* Tolerance : ± 10%

LED Area Flood Lighting

MAHA-PLUS Series

MAH500 / MAH400

MAHA-PLUS Series (Remote Driver type) Specifications

Model Name	MAH500	MAH400
Power Consumption	500W	400W
CCT	5000K (5700K / 4000K / 3000K available)	
Luminous Flux *	75,000 lm	60,000 lm
Luminous Efficacy *	150 lm/W	
CRI	80 Ra	
LED Driving Current	100 mA	
Light Distribution	Asymmetric Wide	
BUG Rating	B3 - U2 - G4	
Input Voltage	DC100V (through RED)	
Fixture Manufacturer	GigaTera Lighting Inc. / Made in Korea / Made in Vietnam	
Size	mm	475 x 525 x 196
	inch	18.7 x 20.7 x 7.7
Weight	11.3 kg / 24.9 lb	
Material	Body	Cast Aluminum
	Optic	AL Coating Reflector
	Cover	Tempered Glass 4.0T (Clear)
Finish	Powder Coating	
IP Rating	IP66	
Operating Temperature	-30°C ~ 50°C	
Option	Mounting	Swivel Bracket, Pole Mount Bracket
Operation Life Time	> 60,000 hours (L80B10) at upto Ta 40 °C	
Warranty	5 Years (12 hours usage per day)	

* Tolerance : ± 10%

Remote Driver Specifications

Model Name	RED1K0	RED800
Power Consumption	1,000W	800W
Compatible Model	MAH500 x 2ea	MAH400 x 2ea
Input Voltage	200 ~ 277 Vac / 347 ~ 480 Vac	
Output Voltage	DC100V	
Input Current	Max. 6.3A (@200Vac)	Max. 5.0A (@200Vac)
	Max. 3.7A (@347Vac)	Max. 2.9A (@347Vac)
Power Factor	≥0.9 at Max load	
Frequency	50 / 60 Hz	
Surge Protection	Line – Line 20kV, Line – FG 20kV	
Driver Type	Constant Current (CC)	
Fixture Manufacturer	GigaTera Lighting Inc. / Made in Korea / Made in Vietnam	
Weight	13.0 kg / 28.7 lb (Include IP Box : 20 kg / 44.1 lb)	
IP Rating	IP66 (When IP box applied)	
Operating Temperature	-30°C ~ 50°C	
Option	Control	Wired (RS-485, DMX-512)
Warranty	5 Years (12 hours usage per day)	

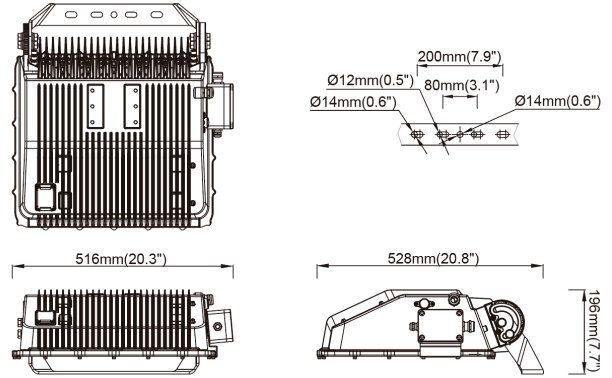
* Tolerance : ± 10%

LED Area Flood Lighting

MAHA-PLUS Series

MAH500 / MAH400

Dimension - MAH500 / MAH400

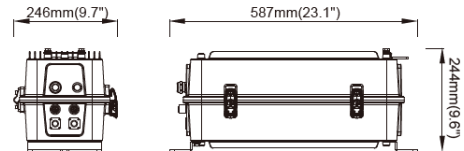
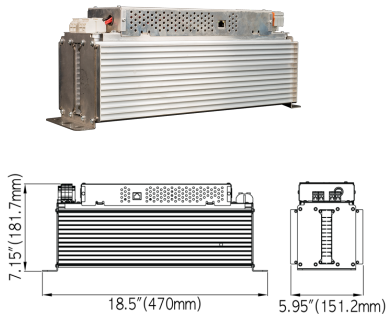


Size	516 x 528 x 196 (mm)
	20.3 x 20.8 x 7.7 (inch)

Remote Driver Dimension

RED (Wired)

RED IP66 BOX (Optional)



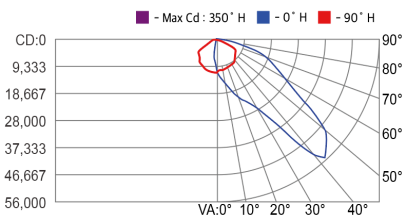
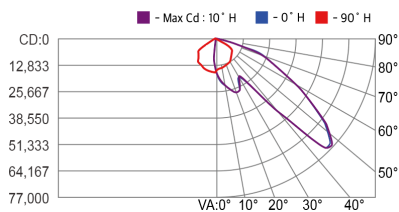
Size	470.0 x 151.2 x 181.7 (mm)
	18.5 x 6.0 x 7.2 (inch)

Size	587.0 x 246.0 x 244.0 (mm)
	23.1 x 9.7 x 9.6 (inch)

Photometry Data

MAH500 / 5000K

MAH400 / 5000K



LED Area Flood Lighting

MAHA-PLUS Series

MAH500 / MAH400


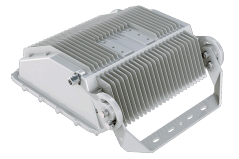



Control System (Optional)

Wireless Control		ZigBee	
Input Voltage	15 Vdc		
Max. Power Consumption	0.3W (@15 Vdc)		
Standard	2.4 GHz – IEEE 802.15.4 (Compatible)		
Network	Mesh		
RF Tx Power	Max. +8 dBm (Typ. 5 dBm)		
Data Rate	250 kbps		
Security	128 bit AES Encryption Algorithms		
Antenna	Omni Type, 2 dBi		
Wired Control		RS-485	DMX-512
Input Voltage	15 Vdc		
Max. Power Consumption	0.2W (@15 Vdc)		
Communication Method	RS-485	DMX-512	
Data Rate	115,200 bps, 8-N-1	250,000 bps, 8-N-2	
NEMA-7			
Mechanical	7 Position : 3 Power Contacts + 4 dimming/Signal Contacts		
Electrical	Power Contacts. 15A, Max.480Vac/dc		
	Dimming Contacts. 0.10A, Max.10Vac/dc		
Model Name	TE, 2213362-4(ANSI C136.41-2013 Dimming Receptacle)		
	te.com		


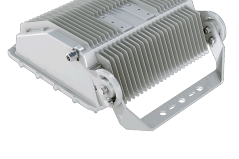


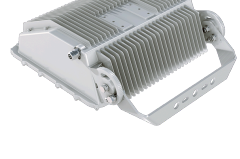
Mount Bracket Installation Reference (Optional)

MAH500 / MAH400

KMDLMBK010320

	Ground Mounting (Basic)	Ground Mounting (Reverse)	Horizontal Mounting (Basic)	Horizontal Mounting (Reverse)
				
	Upward 165° / Downward 15°	Upward 55° / Downward 125°	Upward 75° / Downward 105°	Upward 145° / Downward 35°





KMDLMBK010250

	Ground Mounting (Basic)	Ground Mounting (Reverse)	Horizontal Mounting (Basic)	Horizontal Mounting (Reverse)
				
	Upward 165° / Downward 15°	Upward 55° / Downward 125°	Upward 75° / Downward 105°	Upward 145° / Downward 35°

LED Area Flood Lighting

MAHA-PLUS Series

MAH500 / MAH400

KETBKTL1ZNN001		KMDLMBK010020	
	KMDLMBK010320 + KETBKTL1ZNN001		KMDLMBK010020
			

Ordering Information (MAHA-PLUS Series)				Ordering Code Usage : MAP400-V50WGP			
MAH	000	-	O	OO	O	O	O
	Power Consumption		Input Voltage	CCT (K)	Control System	Fixture Color	Version
	500 = 500W 400 = 400W		B = 100 ~ 240V C = 347 ~ 480V E = 120 ~ 277V H = 200 ~ 277V	57 = 5700K 50 = 5000K 40 = 4000K 30 = 3000K	Z = Wireless(Zigbee) G = NEMA-7 N = None	G = Gray Powder	P = Plus
			V = DC100V (Remote Driver Type)		W = Wired(RS-485) M = Wired(DMX-512)		

※ For Remote Driver type

Ordering Information (Remote Driver)				Ordering Code Usage : RED1K0-HVW		
RED	000	-	O	O	O	O
	Power Consumption		Input Voltage	Output Voltage	Control System	
	1K0 = 1,000W 800 = 800W		C = AC 347 ~ 480V H = AC 200 ~ 277V K = AC 200 ~ 240V	V = DC 100V	W = Wired(RS-485) M = Wired(DMX-512) N = None	