



HERCULES

LED SOLAR LIGHT

INTRODUCTION

The FGE-Hercules Series LED Solar Light is a high-power, all-in-one solar lighting solution engineered for highways, large parking lots, industrial zones, and public areas requiring strong and continuous illumination. Integrated with high-efficiency monocrystalline solar panels, premium lithium batteries, and intelligent MPPT controllers, it ensures maximum charging performance and long-lasting reliability even in low-sunlight conditions.

Equipped with ultra-bright, high-efficacy LED chips and precision optical lenses, the Hercules delivers up to 180 lm/W, providing wide, uniform, and glare-free illumination. Its die-cast aluminum housing with IP66 protection rating ensures excellent heat dissipation, weather resistance, and durability in demanding outdoor environments.

With smart lighting control, motion sensing, and automatic dimming, Hercules optimizes energy use and extends battery life. Easy to install and maintenance-free, it offers a powerful, sustainable lighting solution ideal for large-scale off-grid applications.

NOM **CE** **RoHS** **IP66**

LM-79

LM-80

TM-21

ISTMT

IEC



FEATURES



180lm/W

High Efficacy & Energy Saving: Up to 180 lm/W, reducing energy consumption by over 60% compared with HID fixtures.



Time Control and Automatic Dimming: Smart time-based dimming for higher efficiency and longer lifespan.



Grade A LiFePo4 Battery: Capacity is more than 80% after 2000 cycles.



12V/24V MPPT Controller: Intelligent to control the dimming by PIR/Motion sensor and timer.



High Efficiency Solar Panel: Adopting high efficiency monocrystalline silicon solar panel, conversion rate is more than 21%.



RELIABLE
WARRANTY

Reliable Warranty:
5 Years Warranty.



QUICK & EASY

Easy Installation and Maintenance: Built-in rotating shaft for easy maintenance. All components can be easily replaced.

- Robust Protection:

IP66 waterproof & dustproof, IK10 impact resistance for harsh industrial environments.

- Superior Thermal Management:

Die-cast aluminum housing with optimized heat sink for reliable performance.

APPLICATIONS



Urban or Highway Area Lighting: Solar LED lights eliminate the need for costly trenching, wiring, and grid connection, delivering significant infrastructure savings. Complemented by high-capacity lithium-ion batteries, they provide 2-3 days of reliable backup illumination during cloudy weather or rainstorms, a critical advantage for highways and urban routes in regions with variable climate conditions.



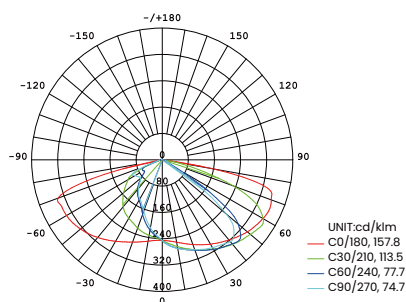
Industrial & Logistics Zones: Solar LED lights are uniquely engineered to thrive in these high-demand environments. By addressing core pain points, including high energy costs, remote locations with limited grid access, and stringent safety regulations, they seamlessly balance reliability, cost-efficiency, safety, and regulatory compliance.

TECHNICAL PARAMETERS

Product Model	Hercules-100W	Hercules-120W	Hercules-150W
Electrical Performance			
Wattage	100W	120W	150W
Input Voltage	DC12.8V	DC12.8V	DC12.8V
Battery Type	LiFeP04	LiFeP04	LiFeP04
Battery Capacity	12.8V 42AH	12.8V 60AH	12.8V 60AH
Charging Time	6 Hours	6 Hours	6 Hours
Discharging Time	36-48h (3-4 nights)	36-48h (3-4 nights)	36-48h (3-4 nights)
Cycles of Battery	>2000	>2000	>2000
Solar Panel	Monocrystalline 36V 120W	Monocrystalline 36V 150W	Monocrystalline 36V 180W
Controller	MPPT	MPPT	MPPT
Optical Performance			
Luminous Efficacy	180lm/W	180lm/W	180lm/W
Luminous Flux	18000lm	21600lm	27000lm
CCT	3000K/4000K/5000K/5700K/6500K Options	3000K/4000K/5000K/5700K/6500K Options	3000K/4000K/5000K/5700K/6500K Options
CRI	Ra≥70	Ra≥70	Ra≥70
Beam Angle	Type II	Type II	Type II
Reliability			
Lifetime	>100,000h	>100,000h	>100,000h
Operating Temperature	-10 ~ +60°C	-10 ~ +60°C	-10 ~ +60°C
Storage Temperature	-40 ~ +70°C	-40 ~ +70°C	-40 ~ +70°C
Ingress Protection	IP66	IP66	IP66
Impact Resistance	IK10	IK10	IK10
Sensor Control			
Daylight Sensor	-	-	-
Opearting Mode	0.5hour @20%, 3hours @ 100%, 1hour @ 50%, 8.5hours @20%, 0.5hours @80%, 0.5hours@15%, 6 dimming levels in total, with a lighting duration of 14 hours.		
Mechanical			
Housing Material	Aluminum	Aluminum	Aluminum
Lens Material	PC	PC	PC
Coating	Grey	Grey	Grey
Net Weight	7.2kg	9.5kg	10.7kg
Dimensions	763X283X106.5mm	763X283X106.5mm	763X283X106.5mm
Recommended Mounting Height	7-8m	8-9m	9-10m
Wind Resistance	42m/s	42m/s	42m/s
Warranty	5 Years	5 Years	5 Years

PHOTOMETRICS

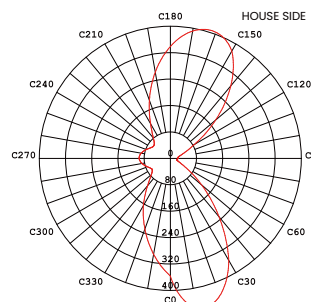
INTENSITY DISTRIBUTION DIAGRAM
IN C PLANS



AVERAGE BEAM ANGLE(50%): 106.0 DEG

Type II

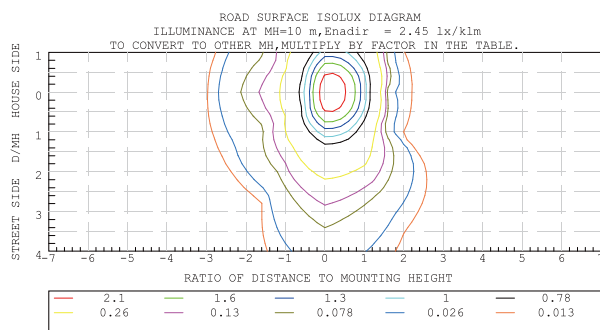
MAX INTENSITY CONE SURFACE
DISTRIBUTION DIAGRAM



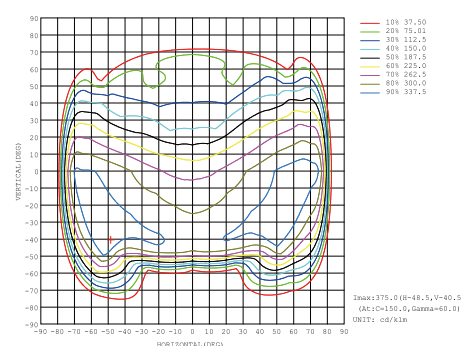
Max @ $\gamma = 60.0$ DEG STREET SIDE

Type II

ILLUMINANCE DISTRIBUTION

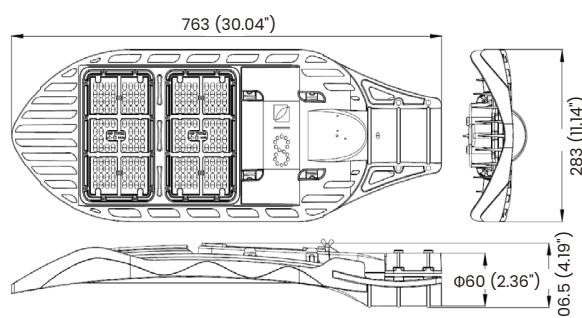


Type II



Type II

MECHANICAL DIMENSIONS



100W 120W 150W

Product Model	Hercules-100W	Hercules-120W	Hercules-150W
Wattage	100W	120W	150W
Outer box (L*W*H)	810X325X170mm (31.89"x12.80"x6.69")	810X325X170mm (31.89"x12.80"x6.69")	810X325X170mm (31.89"x12.80"x6.69")
Q'ty/Ctn	1pc	1pc	1pc
N.W./Ctn	7.2kg/15.84lbs	9.5kg/20.9lbs	10.7kg/23.54lbs
G.W./Ctn	8.5kg/18.7lbs	10.8kg/23.76lbs	11.9kg/26.18lbs
Remarks	0.3M cable	0.3M cable	0.3M cable

ORDER INFORMATION

HERCULES-YY-YY-Y

1 Hercules LED Solar Light

2 Wattage

100W	100W
120W	120W
150W	150W

3 Color Temperature

30K	3000K
40K	4000K
50K	5000K
57K	5700K
65K	6500K

4 Voltage

(Blank)	DC12.8V
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5 Optics

(Blank)	Type II
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6 Control

(Blank)	No Socket
S	Sensor Socket
C	Control Module



WARRANTY PERIOD
**5 YEARS
WARRANTY**



WARRANTY COVERAGE
**LED LIGHT SOURCE,
DRIVER**



AFTER-SALES
SERVICE COMMITMENT
24H RESPONSE



AFTER-SALES
SERVICE COMMITMENT
72H RESOLUTION/REPLACEMENT