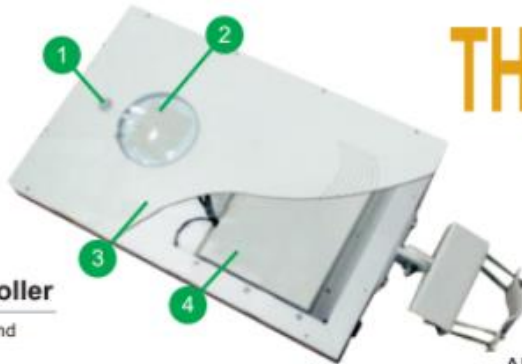




Rev. 000

Advantage

- 1 Sensor**
‘Smart eye’ Motion Sensor
Built-in Passive Infrared Motion Sensor automatically regulates light output.
- 2 LED Lamp**
130lm-150lm/W super bright LED
- 3 Power Management Controller**
Regulates and protects power to lamp and battery packs.
- 4 Battery**
New generation Lithium iron batteries offers 3 times more storage and power capacity versus traditional Lead Acid batteries. Acid batteries.
- 5 Solar Module**
Mono Crystalline Silicon P.V Module, highly efficient and tolerant to heat providing more output on a smaller footprint.
- 6 Long working time**
30 hours long continue lighting



THE ALL-IN-ONE ADVANTAGE

All-in-one solar street light which integrates the green-energy parts solar panel, LED lamp and the Lithium battery into a single product, is with human intelligence induction system to gain the solution of low-energy, long-time, high-luminance and free maintenance. And the same time, it's convenient in the shipment and installation.



SunMaster All in one series

LIGHTING THE WAY

Built specifically to illuminate a wide range of applications, is the world's most versatile and compact LED solar lighting system. Its clever design and slim-line construction incorporates the latest solar power and LED technology, providing many years of consistent performance and operational reliability.

BUILT TO LAST

Has been designed to withstand the harshest and most extreme environments has to offer; From blistering heat to driving rain, hail and sub-zero temperatures. Whatever the environment is, SunMaster rugged construction is up for the challenge. Its internal components offer IP65 weather protection and its external components are built with marine grade aluminium and stainless steel fixings.

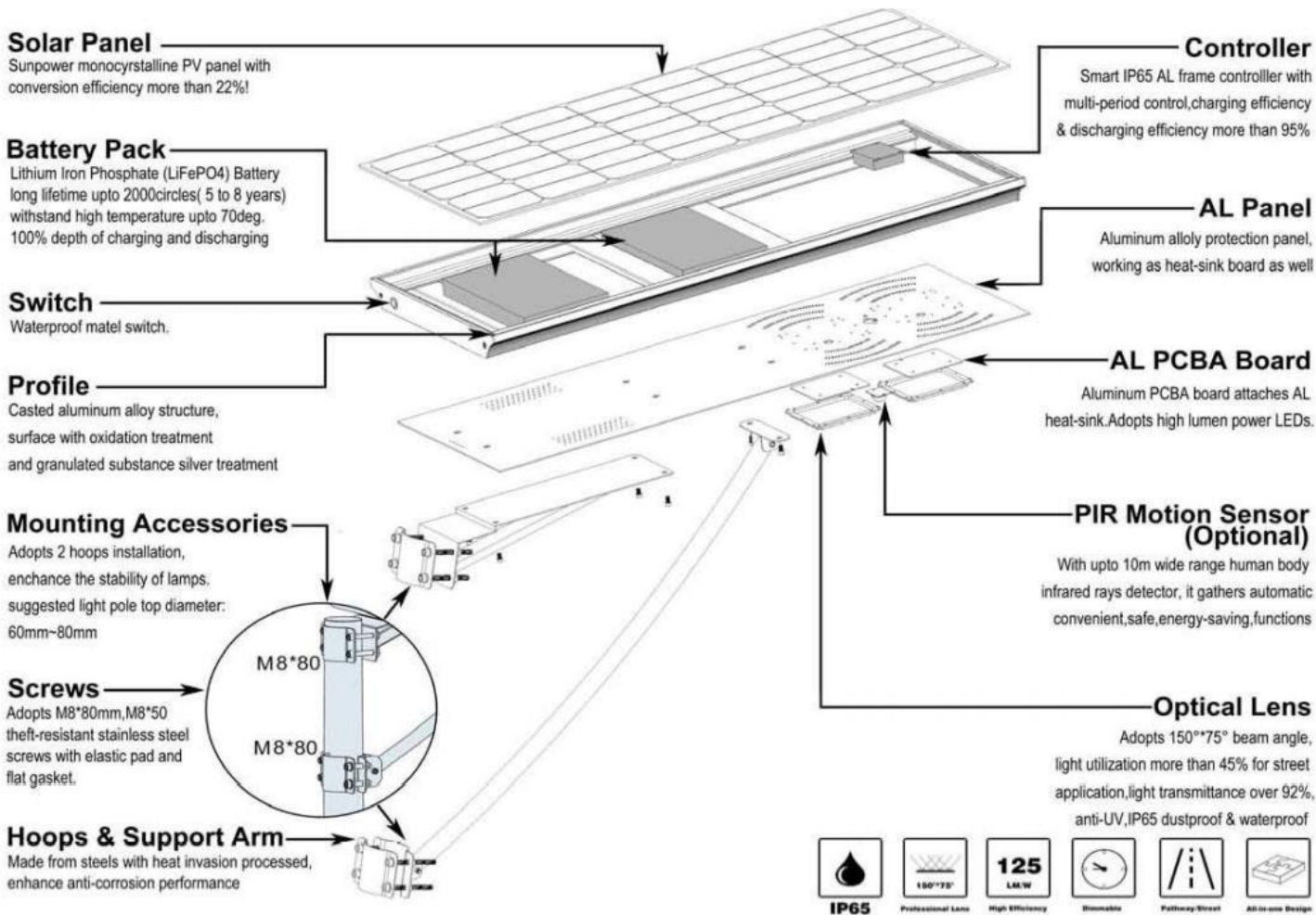
UNIQUE PROPERTIES

- ‘All-In-One’ solar module = Easy installation
- Plug & Play wiring = Fast installation
- Lithium battery technology offers up to 4 times more discharge capacity over Lead Acid types and 3 times more cycle life
- Tamper and Theft proof design
- Automated LED output options for greater battery autonomy
- Customer replacement components



The Most Engaging All-in-one Solar Street Light

Now Enhanced By The World's Most Powerful Features!

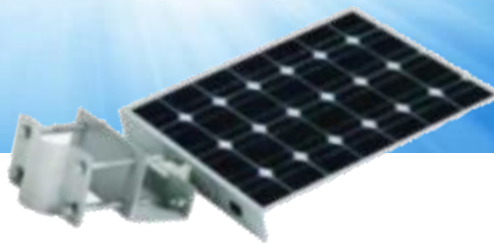


DIANO



MG-LN-15W

Cost Effective Solar Lighting Solution

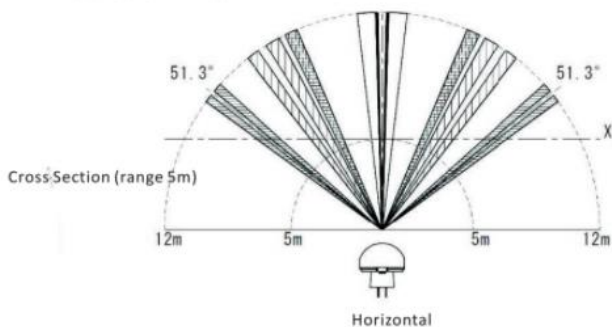


INTEGRATED SOLAR GARDEN LIGHT (15W)		
Solar Panel	Max Power	18v 30W (High efficiency monocrystalline silicon)
	Life time	>25 years
Battery	Type	Lithium battery(LiFeP04)12Ah
	Life time	> 5 years
LED Lamp (With sensor)	Max power	12V 15W
	Led chip brand	USA Bridgelux LED Chip 45x45mil 160-170lm/w
	Lumen (LM)	1650-1800lm
	Life Time	> 50000 hours
	Viewing Angle	120°
Charge time	By Sun	6-10 hours
Discharge time	Saving power	more than 30 hours
Working temperature	Range(°C)	-20°C ~ +70°C
Colour temperature	Range (k)	6000k
Mounting height	Range (m)	4-5 m
Space between light	Range (m)	10-15 m
Lamps material of main	Aluminium alloy	
Certificate	CE / ROHS / IP65	
Warranty Period	3 years (5years warranty available with extra cost)	
Packing & Weight	Product size	710*350*55 mm
	Product weight	8.0 kg
	Packing size	720*420*165 mm

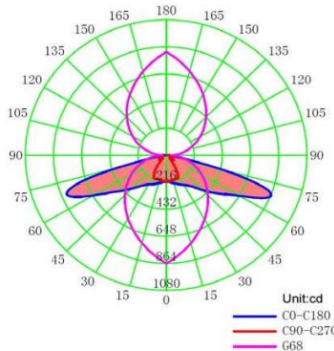


GREEN ENERGY
TECHNOLOGY

PIR Detection Area



Intensity Distribution Diagram



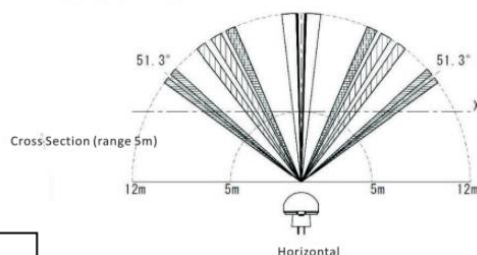
MG-MN-20W

Cost Effective Solar Lighting Solution



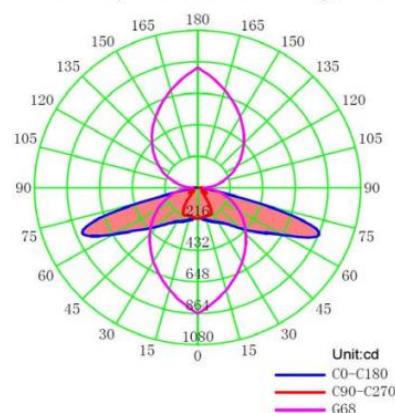
Specifications	
Charging Time	6-8 hours by sun
Discharging Time	>36hours (operated by motion sensor)
	Backup 3days
Working Temperature	-20°C – 70°C
Mounting Height	4-5m (suggested)
Space between light	12-15m (suggested)
Housing material	Aluminum alloy

PIR Detection Area



Photovoltaics	
Module	Monocrystalline silicium cells
Open circuit voltage Voc	22.5V
max. voltage Umpp	18V
Short circuit current Isc	3.17A
max. current Imp	2.78A
max. power Pmax	50W
Tolerance Pmpp	0 to +3%
Dimensions module	898x273mm
Level of effectiveness of solar cells (moulded)	>17.8%

Intensity Distribution Diagram



Illuminant	
LED max. output	20W
LED max. light flux	2200-2400lm
Colour temperature	5.600k to 6.500k
Autonomous time with full battery max.	36h
LED life	>50,000h
State-of-the-art LED	Insect-neutral light

Battery	
capacity	Lithium battery(LiFeP04)18Ah/12.8v
voltage	12V
Battery life	approx.5-6 year
Operating temperature	-20°C~+70°C
Miscellaneous	Battery also charges on cloudy days



MG-LN-25W

Cost Effective Solar Lighting Solution

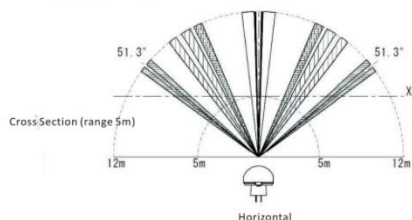


INTEGRATED SOLAR GARDEN LIGHT (25W)		MODEL SMLN-25W
Solar Panel	Max Power	18v 60W (monocrystalline silicon)
	Life time	>25 years
Battery	Type	Lithium battery(LiFeP04) 21Ah
	Life time	> 5 years
LED Lamp (With sensor)	Max power	12V 25W
	Led chip brand	USA Bridgelux LED Chip 45x45mil 160-170lm/w
	Lumen (LM)	2750-3000lm
	Life Time	> 50000 hours
	Viewing Angle	120°
Charge time	By Sun	6-10 hours
Discharge time	Full power	more than 15 hours
	Saving mode	more than 30 hours
Working temperature	Range(°C)	-20°C ~ +70°C
Colour temperature	Range (k)	6000k
Mounting height	Range (m)	6-7 m
Space between light	Range (m)	18-20 m
Lamps material of main	Aluminium alloy	
Certificate	CE / ROHS / IP65	
Warranty Period	3 years (5years warranty available with extra cost)	
Packing & Weight	Product size	1170*330*145 mm
	Product weight	17 kg
	Packing size	1200*410*230 mm

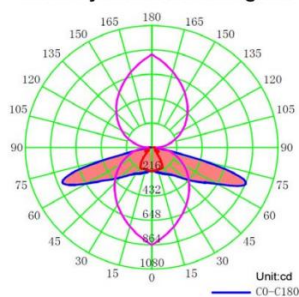


GREEN ENERGY
TECHNOLOGY

PIR Detection Area



Intensity Distribution Diagram





Specifications

Charging Time	6-10 hours by sun
Discharging Time	Full Power >12hours
	Saving mode 3-5 days
Working Temperature	-20°C- 60°C
Mounting Height	6-7m (suggested)
Space between light	18-20m (suggested)
Housing material	Aluminum alloy

Photovoltaics

Module	Monocrystalline silicium cells
Open circuit voltage Voc	22.5V
max. voltage Umpp	18V
Short circuit current Isc	1.87A
max. current Imp	1.69A
max. power Pmax	60W
Tolerance Pmpp	± 3%
Dimensions module	1148×265mm
Level of effectiveness of solar cells (moulded)	17%

Illuminant

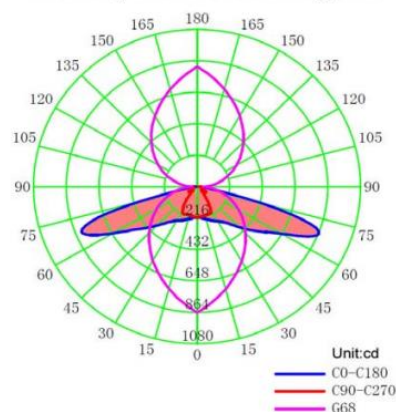
LED max. output	30W
LED max. light flux	3300-3600lm
Colour temperature	5.600k to 6.500k
Autonomous time with full battery max.	45h
LED life	>50,000h
State-of-the-art LED	Insect-neutral light

Battery

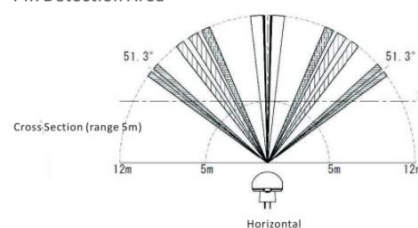
capacity	Lithium battery(LiFeP04)24Ah/12.8v
voltage	12V
Battery life	approx.5-6 year
Operating temperature	-20°C~+70°C
Miscellaneous	Battery also charges on cloudy days



Intensity Distribution Diagram

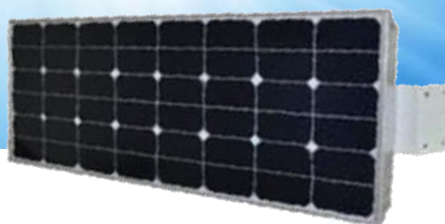


PIR Detection Area



MG-LN-40W

Cost Effective Solar Lighting Solution



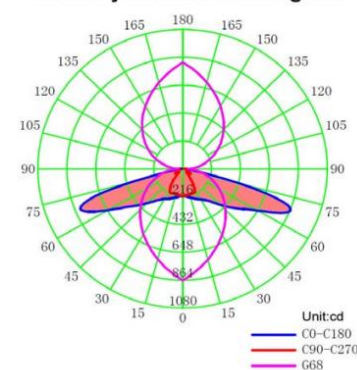
Illuminant	
LED max. output	40W
LED max. light flux	4400-4800lm
Colour temperature	5.600k to 6.500k
Autonomous time with full battery max.	45h
LED life	>50,000h
State-of-the-art LED	Insect-neutral light

Photovoltaics	
Module	Monocrystalline silicium cells
Open circuit voltage Voc	22.5V
max. voltage U _{mp}	18V
Short circuit current I _{sc}	2.50A
max. current I _{mp}	2.22A
max. power P _{max}	60W
Tolerance P _{mp}	±3%
Dimensions module	1148×265mm
Level of effectiveness of solar cells (moulded)	17%

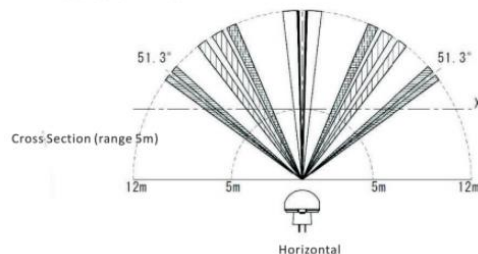
Battery	
capacity	Lithium battery(LiFeP04)27Ah/12.8v
voltage	12V
Battery life	approx.5-6 year
Operating temperature	-20°C~+70°C
Miscellaneous	Battery also charges on cloudy days

Others	
Charging Time	6-10 hours by sun
Discharging Time	Full Power >12hours
	Saving mode 3-5 days
Working Temperature	-20°C- 60°C
Mounting Height	6-7m (suggested)
Space between light	18-20m (suggested)
Housing material	Aluminum alloy

Intensity Distribution Diagram



PIR Detection Area



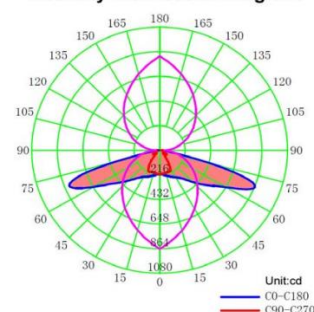
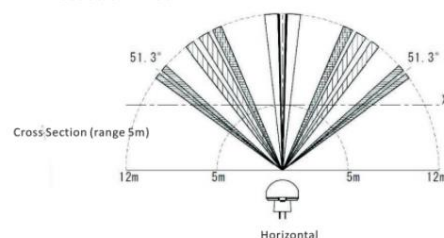
DIANO**MG-LN-50W****Cost Effective Solar Lighting Solution**

Battery	
capacity	Lithium battery(LiFeP04)33Ah/12.8v
voltage	12V
Battery life	approx.5-6 year
Operating temperature	-20°C~+70°C
Miscellaneous	Battery also charges on cloudy days

Illuminant	
LED max. output	50W
LED max. light flux	5000-5500lm
Colour temperature	5.600k to 6.500k
Autonomous time with full battery max.	36h
LED life	>50,000h
State-of-the-art LED	Insect-neutral light

Photovoltaics	
Module	Monocrystalline silicium cells
Open circuit voltage Voc	22.5V
max. voltage U _{mp}	18V
Short circuit current I _{sc}	4.85A
max. current I _{mp}	4.45A
max. power P _{max}	80W
Tolerance P _{mp}	0 to +3%
Dimensions module	1070×397mm
Level of effectiveness of solar cells (moulded)	>17.8%

Others	
Charging Time	6-8 hours by sun
Discharging Time	>36hours (operated by motion sensor)
	Backup 3days
Working Temperature	-20°C– 70°C
Mounting Height	5-7m (suggested)
Space between light	15-22m (suggested)
Housing material	Aluminum alloy

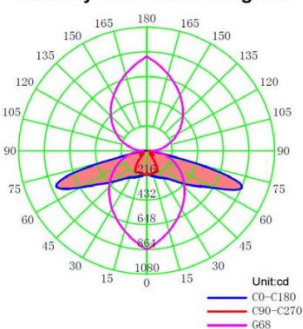
**Intensity Distribution Diagram****PIR Detection Area****WWW.MIGDAL-OR.ORG**

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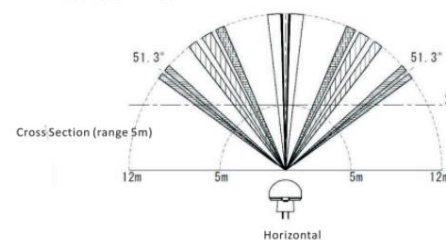


Battery	
capacity	Lithium battery(LiFeP04)42Ah/12.8v
voltage	12V
Battery life	approx.5-6 year
Operating temperature	-20°C~+70°C
Miscellaneous	Battery also charges on cloudy days

Illuminant	
LED max. output	60W
LED max. light flux	6600-7200lm
Colour temperature	5.600k to 6.500k
Autonomous time with full battery max.	36h
LED life	>50,000h
State-of-the-art LED	Insect-neutral light

Intensity Distribution Diagram

Photovoltaics	
Module	Monocrystalline silicium cells
Open circuit voltage Voc	22.5V
max. voltage Umpp	18V
Short circuit current Isc	5.57A
max. current Imp	5.0A
max. power Pmax	90W
Tolerance Pmpp	0 to +3%
Dimensions module	1070x397mm
Level of effectiveness of solar cells (moulded)	>17.8%

PIR Detection Area

Others	
Charging Time	6-8 hours by sun
Discharging Time	>36hours (operated by motion sensor)
	Backup 3days
Working Temperature	-20°C- 70°C
Mounting Height	5-8m (suggested)
Space between light	15-25m (suggested)
Housing material	Aluminum alloy



**Battery**

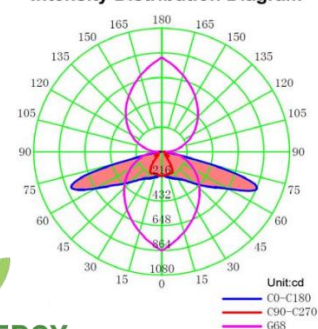
capacity	Lithium battery(LiFeP04)42Ah/12.8v
voltage	12V
Battery life	approx.5-6 year
Operating temperature	-20°C~+70°C
Miscellaneous	Battery also charges on cloudy days

Illuminant

LED max. output	60W
LED max. light flux	6600-7200lm
Colour temperature	5.600k to 6.500k
Autonomous time with full battery max.	36h
LED life	>50,000h
State-of-the-art LED	Insect-neutral light

**Photovoltaics**

Module	Monocrystalline silicium cells
Open circuit voltage Voc	22.5V
max. voltage Umpp	18V
Short circuit current Isc	5.57A
max. current Imp	5.0A
max. power Pmax	90W
Tolerance Pmpp	0 to +3%
Dimensions module	1070x397mm
Level of effectiveness of solar cells (moulded)	>17.8%

Intensity Distribution Diagram

**GREEN ENERGY
TECHNOLOGY**

Others

Charging Time	6-8 hours by sun
Discharging Time	>36hours (operated by motion sensor)
	Backup 3days
Working Temperature	-20°C- 70°C
Mounting Height	5-8m (suggested)
Space between light	15-25m (suggested)
Housing material	Aluminum alloy



DIANO

MG-LN-80W

Cost Effective Solar Lighting Solution



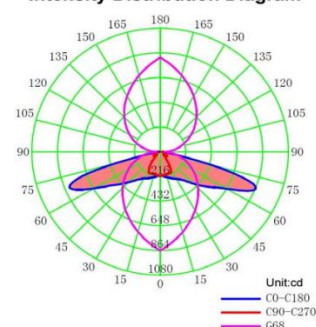
Specification	
Charging Time	6-10 hours by sun
Discharging Time	10-12hours/day
	3 days backup
Working Temperature	-20°C- 70°C
Mounting Height	8-9m (suggested)
Space between light	26-32m (suggested)
Housing material	Aluminum alloy

Photovoltaics	
Module	Monocrystalline silicium cells
Open circuit voltage Voc	22.5V
max. voltage Umpp	18V
Short circuit current Isc	4.40A
max. current Imp	4.20A
max. power Pmax	100W
Tolerance Pmpp	± 3%
Dimensions module	1178x385mm ■
Level of effectiveness of solar cells (moulded)	17%



Illuminant	
LED max. output	80W
LED max. light flux	8800-9600lm
Colour temperature	5.600k to 6.500k
Autonomous time with full battery max.	45h
LED life	>50,000h
State-of-the-art LED	Insect-neutral light

Intensity Distribution Diagram



Battery	
capacity	Lithium battery(LiFePO4)56Ah/12.8v
voltage	12V
Battery life	approx.5-6 year
Operating temperature	-20°C~+70°C
Miscellaneous	Battery also charges on cloudy days

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DIANO

MG-LN-120W

Cost Effective Solar Lighting Solution



Specification	
Charging Time	6-8 hours by sun
Discharging Time	10-12hours/day
	3 days backup
Working Temperature	-20°C - 70°C
Mounting Height	5-8m (suggested)
Space between light	15-25m (suggested)
Housing material	Aluminum alloy

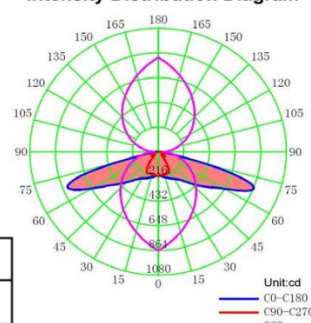
Photovoltaics	
Module	Monocrystalline silicium cells
Open circuit voltage Voc	43.2V
max. voltage U _{mp}	36V
Short circuit current I _{sc}	3.08A
max. current I _{mp}	2.78A
max. power P _{max}	130W
Tolerance P _{mp}	±3%
Dimensions module	1588×397mm
Level of effectiveness of solar cells (moulded)	17%



Illuminant	
LED max. output	120W
LED max. light flux	12500-13500lm
Colour temperature	5.600k to 6.500k
Autonomous time with full battery max.	45h
LED life	>50,000h
State-of-the-art LED	Insect-neutral light

Battery	
capacity	Lithium battery(LiFeP04)66Ah/25.6v
voltage	24V
Battery life	approx.5-6 year
Operating temperature	-20 °C ~ +70 °C
Miscellaneous	Battery also charges on cloudy days

Intensity Distribution Diagram



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