

MODEL

EG80

OFF-GRID SOLAR LED LIGHTING

The EG80 is ideal for ...

Park and pathway lighting and many other general lighting applications

New facilities where:

- access to the electrical grid requires extensive trenching
- grid connection is difficult or impossible
- underground checks and/or permits are costly

Existing facilities where:

- access to the electrical grid requires extensive trenching or environmental disruption
- disruption of site will result in loss of business
- underground wiring / conduit is nearing end of life
- copper theft and vandalism is a concern

The Carmanah Difference:

- Reduced project cost when compared to other solar LED lighting systems: a result of superior uniformity and lumen output
- Adaptive lighting allows user to determine how light is applied
- Pole-top integrated design for easy installation and theft prevention
- Recyclable battery & components
- Reliable, year-round performance

Capabilities:

- High-efficiency LED light fixture
- Adaptive lighting (operating profiles)
- Standard IES distributions (Type II, III, IV, V) and flood
- 6000K and 4300K colour temperature options

LED Fixtures

The EG80 features a high performance LED fixture. With superior uniformity and light performance, Carmanah solar lighting systems illuminate a given area with fewer systems than other solar solutions, providing significant savings in overall project cost.



Carmanah EG80 Off-Grid Solar LED Lighting System

Adaptive Lighting

Adaptive lighting allows for different light levels during the course of the night, based on vehicle and pedestrian activity. A choice of operating profiles permits the light to be dimmed or turned off completely when facility usage is reduced.

By dimming or turning the system off when light is not needed energy is conserved and light levels during peak hours are maximized. This allows for brighter illumination, smaller system size and lower system cost.

Energy Management System

The Energy Management System (EMS) is a critical part of the EG80 system. The EMS ensures bright, reliable light output and healthy, high-functioning lighting systems for years of autonomous operation.

The EMS provides:

- Efficient transfer & dynamic management of energy
- Seven operating profile options (adaptive lighting)
- Smaller sized systems with greater lumen output

REPRESENTED IN YOUR REGION BY:





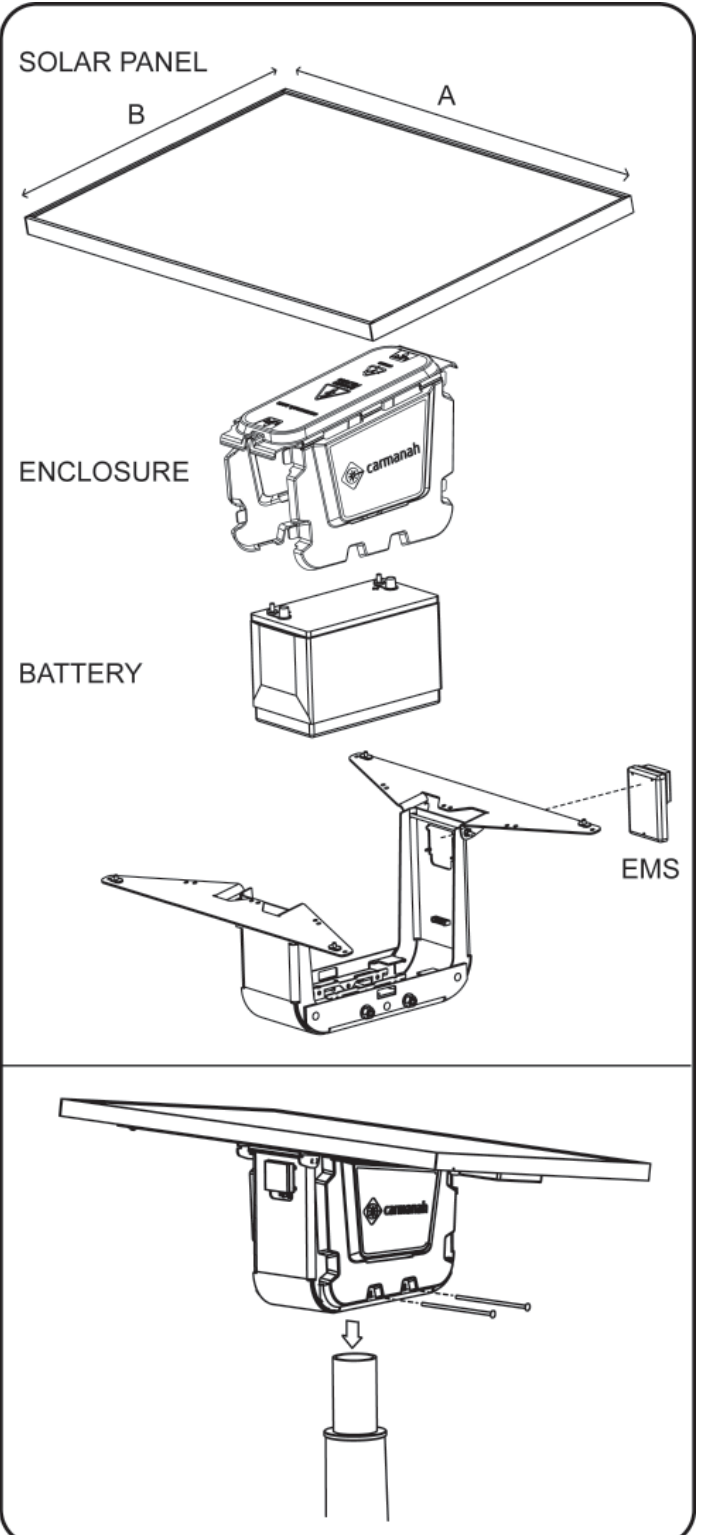
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Carmanah EG80 Off-Grid Solar LED Lighting System

SOLAR ENGINE	10° Tilt	15° Tilt	20° Tilt	45° Tilt
EPA*	0.271 m ² (2.92 ft ²)	0.349 m ² (3.76 ft ²)	0.417 m ² (4.49 ft ²)	0.642 m ² (6.91 ft ²)
APA	0.209 m ² (2.25 ft ²)	0.268 m ² (2.89 ft ²)	0.321 m ² (3.46 ft ²)	0.494 m ² (5.32 ft ²)
Weight (without batteries)	18.6 kg (41.0 lb)	18.6 kg (41.0 lb)	18.6 kg (41.0 lb)	21.1 kg (46.5 lb)
Weight (with batteries)	47.7 kg (105.0 lb)	47.7 kg (105.0 lb)	47.7 kg (105.0 lb)	50.1 kg (110.5 lb)
Dimension A	121 cm (47.6 in)			
Dimension B	54.0 cm (21.3 in)			
Watts	>80			
BATTERIES				
Type	Deep cycle absorbed glass mat (AGM) or gel			
Rating	1,800 cycles to 20% depth of discharge at 20° C (68° F)			
FIXTURE				
LED	18-40 LEDs, single fixture			
MOUNTING				
Solar Engine	Top of pole, round tenon 8.9 cm (3.5 in) outer diameter, 7.62cm (3.0 in) in length			
Fixture	Mounts to horizontal tenon 4.25 cm (1.675 in) or 6 cm (2.375 in) outer diameter			
Wind Load Rating	241 kph (150 mph)**	241 kph (150 mph)**	241 kph (150 mph)**	209 kph (130 mph)**
ENERGY MANAGEMENT SYSTEM (EMS)				
Optional Operating Profiles	Dusk-to-Dawn Fixed Night, 6hr Fixed Night, 8hr Split Night 5hr, 25%, 2hr Split Night 5hr, 25%, 4hr Split Night 7hr, 25%, 2hr Split Night 7hr, 25%, 4hr			
Day/night transitioning	Via solar panels			
Status Indicators	Battery connection, low/high voltage disconnect, dimming			
PHOTOMETRICS				
Fixture Efficacy	Minimum 85 lm/W			
IES Light Distributions	Type II, Type III, Type V			
Other	International Dark-Sky Association (IDA) approved, measured for performance using IESNA standards including IES BUG rating system			
Photometry	Certified photometry per IESNA LM-79-2008 & LM-80-2008			
Typical Applications	Path, park lighting			
Photometric performance depends on the solar environment of location and specified operating profile. Contact a Carmanah representative for exact lumen output and specifications for your application.				
CERTIFICATIONS				
CE 2004-108-CE, EN 55015, EN 61547 for emissions and immunity IP 68 Energy Management System (EMS)				
ACCESSORIES				
Remote control				



* Effective Projected Area (EPA) calculated as the Actual Projected Area (APA) multiplied by a drag coefficient of 1.3. EPA of engine only; does not include fixture EPA.

** 3 second gust as per AASHTO 2001

Note: specifications subject to change without notice