



Carmanah EverGEN Solar LED Lighting FAQ

Does the illumination from Carmanah EverGEN™ solar LED lighting solutions last throughout the night?

Absolutely. Carmanah solar LED lighting incorporates an intelligent energy management system that ensures reliable, all-night operation virtually anywhere in the world. Energy management is the foundation of reliable solar lighting as it allows a system to monitor the surrounding environment and adjust to prevailing conditions.

At the core of every Carmanah solar LED lighting solution, intelligent energy management also enables motion control capabilities, operating profiles and provides for fail-safe features that ensure illumination will not stop unexpectedly.

Does Carmanah EverGEN solar LED lighting meet standard IES light distributions?

Yes. Carmanah solar LED lighting is available with Type II, III, IV and V standard IES light distributions.

Does Carmanah EverGEN solar LED lighting meet recommended IES illumination levels?

Yes. Carmanah solar LED lighting delivers up to 6800 lumens and meets recommended IES illumination levels for roadway and parking lots lighting as defined in RP-8 and RP-20.

What kind of light can Carmanah EverGEN solar LED lighting replace?

Carmanah's solar LED lighting delivers the equivalent illumination of a 70 to 200 Watt HID AC powered lighting system and functions completely off the grid.

What kind of applications can Carmanah EverGEN solar LED lights be used for?

Currently, Carmanah solar LED lighting solutions are ideal for a wide variety of applications including:

- Parking lots
- Residential streets
- Site lighting
- Pathway lighting

What fixtures can be used with Carmanah EverGEN solar LED lighting solutions?

Carmanah solar LED lighting solutions accommodate three BetaLED fixtures: LEDway™, THE EDGE™ (direct mount) and THE EDGE floodlight.

Can fixtures be purchased from BetaLED and used with Carmanah solar engines?

No. The BetaLED fixtures that are provided with Carmanah solar LED solar lighting solutions have been optimized to work with Carmanah solar engines. Fixtures must be purchased through Carmanah.

Can Carmanah EverGEN solar LED lighting accommodate floodlighting applications?

Yes. Carmanah solar LED lighting solutions are available with BetaLED THE EDGE™ floodlighting fixture with 15°, 25°, 40°, 60° optics.

Can Carmanah EverGEN solar LED lighting accommodate more than one fixture?

Yes. The EverGEN 1520, 1530 and 1710 can all accommodate up to two fixtures of 100 W HID equivalent lighting each.

Can Carmanah EverGEN solar LED lighting incorporate fixtures other than BetaLED fixtures?

No. Carmanah solar area lighting systems have been specifically configured for BetaLED luminaires and are optimized for use only with BetaLED technology. For this reason, other LED fixtures are not compatible with the system.

What mounting options are available for the available BetaLED fixtures?

Currently Carmanah solar area lighting systems are available with direct mount for BetaLED THE EDGE fixtures, luminaire arms for BetaLED LEDway fixtures and floodlight mounting for BetaLED THE EDGE floodlight fixtures.

Can you separate the solar engine from luminaire?

Yes. The solar engine can be mounted up to 100 feet away from the luminaire.

What is an operating profile?

Unique to Carmanah's solar LED lighting solution, an intelligent operating profile allows for illumination levels to be dimmed when light is not needed. Light levels can be set to fluctuate from initial intensity, down to 33% of initial intensity when light is not needed, and back to initial intensity as traffic increases once again. The length of time spent at different intensities can be set for individual applications.

Operating profiles also allow for the fixture to be turned on at initial intensity for a period of time and then to shut off completely for the remainder of the night.

Dusk-to-dawn operation at steady intensity is also possible.

Does Carmanah EverGEN solar LED lighting offer motion sensing capabilities?

Yes. Motion sensing can be incorporated into the BetaLED fixture to provide for intelligent lighting control based on application needs. Motion sensing is available with the EverGEN 1500 and 1710 products.

Are poles supplied with the solar area lighting system?

Yes. Carmanah is able to provide poles for all EverGEN solar LED lighting solutions.

How do I decide what system size I need?

The light output required, geographic location and the operating profiles/motion control options an application can accommodate will determine the size of solar LED lighting solution that is appropriate for an individual application.

Carmanah offers an online system selection tool to lighting representatives that allows for quick and easy system sizing.

What is the warranty on a Carmanah EverGEN solar LED lighting system?

Carmanah EverGEN solar LED lighting systems come with a limited five year system warranty and a pro-rated five year battery warranty.

How long do the batteries inside a Carmanah solar LED lighting system last?

Battery life is dependant upon environmental conditions and the application for which the system is installed, but batteries can typically be expected to last for five years.

Are the batteries inside Carmanah solar LED lighting systems recyclable?

Yes. The batteries inside Carmanah solar LED lighting systems are fully recyclable. The details for local battery recycling facilities within the US can be obtained through www.earth911.com.

What is the wind speed rating of the mount for Carmanah solar LED lighting systems?

Carmanah mounts are rated to AASHTO standards. More detailed information can be obtained by contacting Carmanah directly.

How can Carmanah EverGEN solar LED lighting save me money?

Carmanah EverGEN solar LED lighting can allow for cost savings in several different ways:

Reduced overall project cost

When looking to install solar LED lighting, the Carmanah EverGEN series offers the opportunity to significantly reduce overall project cost. Light output from a solar LED lighting system is entirely dependant upon how well the system has been engineered. Carmanah EverGEN solar LED lighting systems are able to provide higher light levels than other solar systems their size, meaning less systems will be needed to meet the overall light level requirements of a project.

Trenching & cabling

Offering easy installation without the need to trench or cable, Carmanah solar LED lighting systems reduce installation cost and time. Carmanah EverGEN solar LED lighting can also eliminate costly trenching projects in areas where grid access is difficult and can preserve the integrity of the surroundings when environmental disruption is not an option.

Ongoing electrical bills, maintenance

No ongoing electrical bills, low maintenance and no bulb changes allow Carmanah solar LED lighting to reduce long term cost investments in lighting projects.

How can Carmanah EverGEN solar LED lighting contribute to my sustainability goals?

Carmanah EverGEN solar LED lighting systems are a visibly sustainable solution that can make a powerful statement about the move towards environmentally-friendly practices. Solar panels are easily recognizable as an alternative energy source and members of the public have the opportunity to see and interact with a solar LED lighting system, making it a conspicuous choice for projects where eco-friendly choices are paramount to project goals.

Where solar LED lighting is not feasible for an entire project, it can be implemented alongside hardwired solutions to signify a move towards eco-friendly practices.

By bringing renewable energy technology into a project, solar LED lighting can also help contribute to renewable energy credit programs.