



## Solar Power Solutions for **OUTDOOR LIGHTING** **ANYWHERE, ANYTIME**



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Carmanah is the brand of choice for integrated solar power systems around the world.

Anywhere conventional power is unreliable, unavailable, or just too costly to access, Carmanah's unique solar power solutions offer a new level of freedom and convenience.

Carmanah's products are among the best performing and most reliable in the industry — built to provide years of trouble-free service, even under the most extreme environmental conditions.

Call your Carmanah representative today for more information and pricing.

EFFECTIVE LIGHTING IS ESSENTIAL FOR MAINTAINING NIGHTTIME SAFETY AND SECURITY, BUT IN MANY CASES, A RELIABLE SOURCE OF ELECTRICITY MAY BE UNAVAILABLE OR TOO COSTLY TO ACCESS — UNTIL NOW.

CARMANAH'S EVERGEN™ SOLAR ENGINE IS A COMPACT, SELF-CONTAINED SOLAR-POWER SYSTEM THAT USES THE SUN'S ENERGY TO POWER OUTDOOR LIGHTING WHEREVER YOU NEED IT. AS A CONVENIENT, ECONOMICAL AND ENVIRONMENTALLY FRIENDLY ALTERNATIVE TO GRID-SUPPLIED ELECTRICITY, CARMANAH'S SOLAR ENGINE OFFERS MANY ADVANTAGES:

- FAST, EASY INSTALLATION
- INTELLIGENT ENERGY MANAGEMENT
- RELIABLE YEAR-ROUND OPERATION

WHETHER COST, LOCATION, OR SIMPLY THE OPPORTUNITY TO MAKE A "GREEN" CHOICE DRIVES YOUR DECISION TO CHOOSE SOLAR — CARMANAH HAS THE TECHNOLOGY TO MEET ALL YOUR OUTDOOR LIGHTING NEEDS.







Public Space



Sign Lighting



Remote Locations



Pathways



Perimeter Fence-line Monitoring

## Features and benefits

### Solar-powered general illumination — convenient, economical, and environmentally friendly

The EverGEN™ solar engine is a self-contained power supply that provides 12-volt DC power wherever you need it — generated from the free, limitless resource of the sun. Unlike other solar-power systems, the EverGEN solar engine is completely self-contained, with all components (including solar modules, rechargeable batteries, sensors and electronics) integrated within a sleek, compact and durable pole-mounted design.

When paired with Carmanah's industry-proven LED luminaire, the EverGEN solar engine becomes a versatile, stand-alone lighting solution — the ideal, eco-friendly choice for all your general illumination needs.

### Easy installation and maintenance-free operation

With no trenching, cabling or permits required, an EverGEN solar engine can be installed in minutes, with minimal technical expertise, at a fraction of the cost of a hard-wired connection. An adjustable mounting assembly allows you to tilt and rotate the system during installation for optimal orientation to the sun at any latitude. Free from the restrictions of a grid connection, the stand-alone solar engine is designed to provide many years of uninterrupted, maintenance-free power — without the monthly utility bill.

### Durable and secure

Designed to operate reliably in extreme climates and harsh conditions at nearly any location on Earth, the EverGEN solar engine incorporates Carmanah's field proven solar power technology, used in more than 250,000 installations worldwide. The self-contained design protects sensitive components within a rugged aluminum shell, and security fasteners protect the device from theft and tampering.

### Intelligent energy management

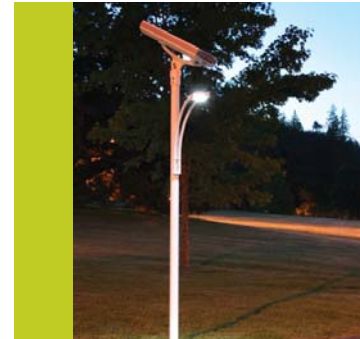
Carmanah's optional MICROSOURCE® energy management system (EMS) automatically balances energy requirements with available resources, allowing each solar engine to "learn" and adapt to its environment. With MICROSOURCE EMS, lighting characteristics such as automatic on/off times and default light output levels can also be customized for maximum efficiency, reliability and convenience.

### Solar power for lighting and more...

The EverGEN solar engine combines compact size with unprecedented versatility — in addition to powering the LED luminaire, a single solar engine can power a variety of third-party equipment such as cameras, sensors, communications equipment and more.



General Illumination



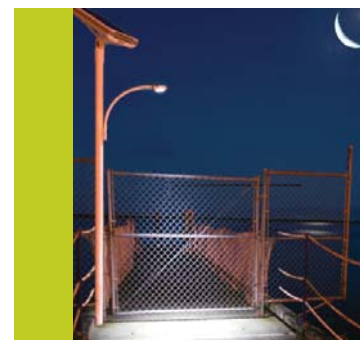
Campuses and Schools



Parking Lots



Parks and Pathways



Fence and Perimeter Security

## Applications

### Area lighting — when and where you need it

In locations where the optimal placement for lighting may be impractical or impossible for a traditional hard-wired connection due to a lack of grid access, the advantages of a versatile solar-powered solution are considerable.

- rural pathways
- parks
- parking lots
- campuses
- construction sites
- marinas and harbors
- remote airfields

### Field-proven LED luminaire technology

To ensure light output is directed only where it's needed, Carmanah's LED luminaires produce a specially designed beam pattern that minimizes spillover, making them ideal for all types of general illumination, including security lighting and neighborhood-friendly illumination.

The EverGEN solar engine and LED luminaire are the latest, most advanced offerings from Carmanah, the world leader in integrated, self-contained solar power systems and stand-alone LED lighting technology. It's a versatile solution that is reliable, cost effective and environmentally friendly — now and for the future!

## Options

### Sizes

The EverGEN solar engine for area lighting is available in five standard sizes:

- 10 watt (SE-10)
- 20 watt (SE-20)
- 30 watt (SE-30)
- 50 watt (SE-50)
- 80 watt (SE-80)

### Colors

The solar engine features a corrosion-resistant aluminum housing with durable powder-coated finish in black or white.\*

### Mounting

SE-10, SE-20, SE-30 solar engines are designed to be mounted atop a standard 3" diameter pole. SE-50 and SE-80 solar engines are designed to be mounted on the side of a 3.5" diameter or 4" diameter pole using a custom mounting arm (available separately).

### Optional Luminaires

Carmanah offers two industrial-strength LED luminaires that are compatible with all EverGEN solar engine models: the LED-4 (with 4 LEDs) and the LED-12F (with 12 LEDs). The LED-4 can be attached to a solar engine pole using a specially-designed mounting arm. Standard colors available for Carmanah's LED luminaires are black or white.\* Contact your Carmanah representative for more information.

## Choosing the right solar engine

To accommodate a variety of low-voltage (12VDC) devices, Carmanah offers self-contained solar engines in five sizes ranging from 10 to 80 watts in power.\*\* Choosing the solar engine that's right for your needs depends on several factors: for example, where's the application, what type of devices do you want to power, how many devices in total, and what time(s) will they run?

Your Carmanah representative can help you assess your power requirements, and recommend the solar engine that's best suited to your application.

For more information, call Carmanah at 1-877-722-8877 or e-mail [info@carmanah.com](mailto:info@carmanah.com).

\* Custom colors available, minimum quantities and setup charges may apply.

\*\* For larger applications, Carmanah offers larger format solar power systems for unlimited power capabilities.

