EverGen™ EMS Solar Lighting Controller / LED Driver
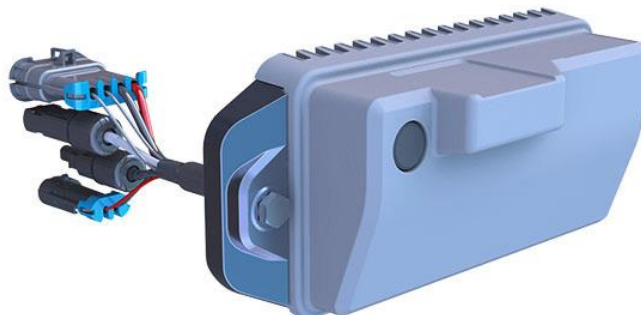
Programmed or custom run modes include:

▶ Hours after Dusk: 03, 05, 07, 09, or All Night

▶ Dimming Percentage: None, 30%

▶ Hours Before Dawn: 02, or All Nighty

Features

▶ Bluetooth and App for local configuration and testing

▶ Satellite modem for remote monitoring with Insight Remote Monitoring Platform Subscription

▶ Solar panel and battery overvoltage protection

▶ LED short circuit protection and unconnected LED protection

▶ Internal PV disconnect (no external diodes required)

▶ Reverse battery polarity protection

▶ Self calibrating load, timing, and charging circuitry

Benefits

▶ Flexible operating modes (dusk-to-dawn, split night, split night with dimming)

▶ Fully tested at the Sol factory before installation and shipment to ensure reliable operation and trouble-free startup

▶ Programmed by Sol based on your project requirements eliminating confusing switch and knob setting

▶ Bluetooth and app for simple and secure setup

▶ Integrated MPPT charging and LED driving system reduces system failures, overall system complexity, and cost

▶ Integrated surge protection and noise reduction

▶ Keyed connectors for simple and reliable assembly

▶ Temperature-compensated and MPPT-controlled battery charging to maximize battery life and energy collection

▶ High-temperature charge compensation to ensure component longevity

▶ Ruggedized solid-state design ensures long life and no maintenance

▶ Memory averaging to ensure accurate turn-on and turn-off of lights to prevent false responses due to weather variations

▶ Ten-year limited warranty

Sol
by Sunna Design®

EverGen™ EMS Solar Lighting Controller / LED Driver

ELECTRICAL

Operating Voltage	12/24 VDC
Operating Current	25A max
LED Drive Current	3.5A max. 100W
Lamp Drive Voltage	65 VDC max.
PV Voltage Input	55 VDC max.
Low Voltage Disconnect (LVD)	11.6 / 23.2 VDC
Low Voltage Reconnect (LVR)	12.1 / 24.2 VDC

CHARGING

Self-consumption	< 5 mA
Charging Method	Maximum Power Point Tracking (MPPT)
Battery Fuse, External	30A max.

COMMUNICATION

Local Control	Bluetooth and app
Remote Monitoring	Satellite modem to Insight remote monitoring platform

PHYSICAL

Operating Temperature	-40 to +60 °C (-40 to +140 °F)
Humidity	100% Condensing
Packaging	Aluminum heatsink, polycarbonate cover, gasket and vent, IP68
Weight	0.74 kg (26 oz.)
Size (L x W x H)	234.7 x 98.7 x 71.0 mm (9.2 x 3.9 x 2.8 in)

Top View

$\begin{bmatrix} 98.7mm \\ 3.9in \end{bmatrix}$

$\begin{bmatrix} 234.7mm \\ 9.2in \end{bmatrix}$

$\begin{bmatrix} 71mm \\ 2.8in \end{bmatrix}$

Side View
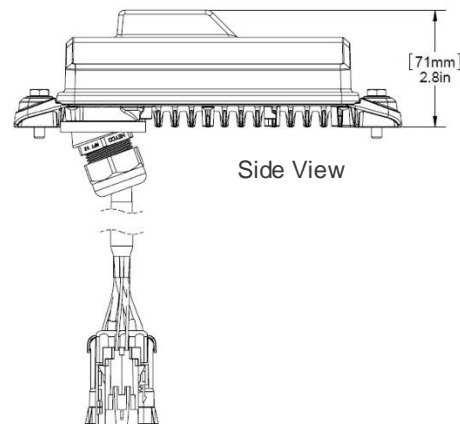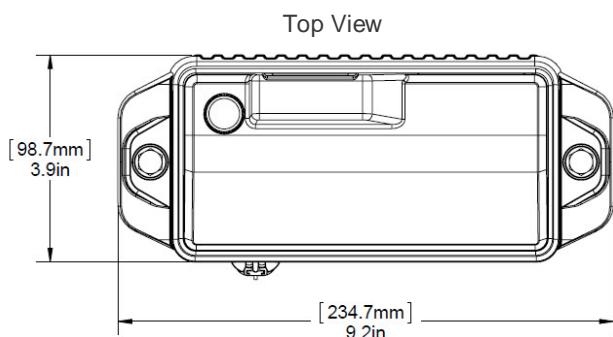
Specifications subject to local environmental conditions.
Specifications may be subject to change.
US and International patents apply. Other patents pending.
"Sol" logo is a trademark of Sunna Design

All Sol products are manufactured in facilities certified to ISO quality standards.