

# Solar-Powered Elevated Runway Guard Light - ERGL



## Solar Engine

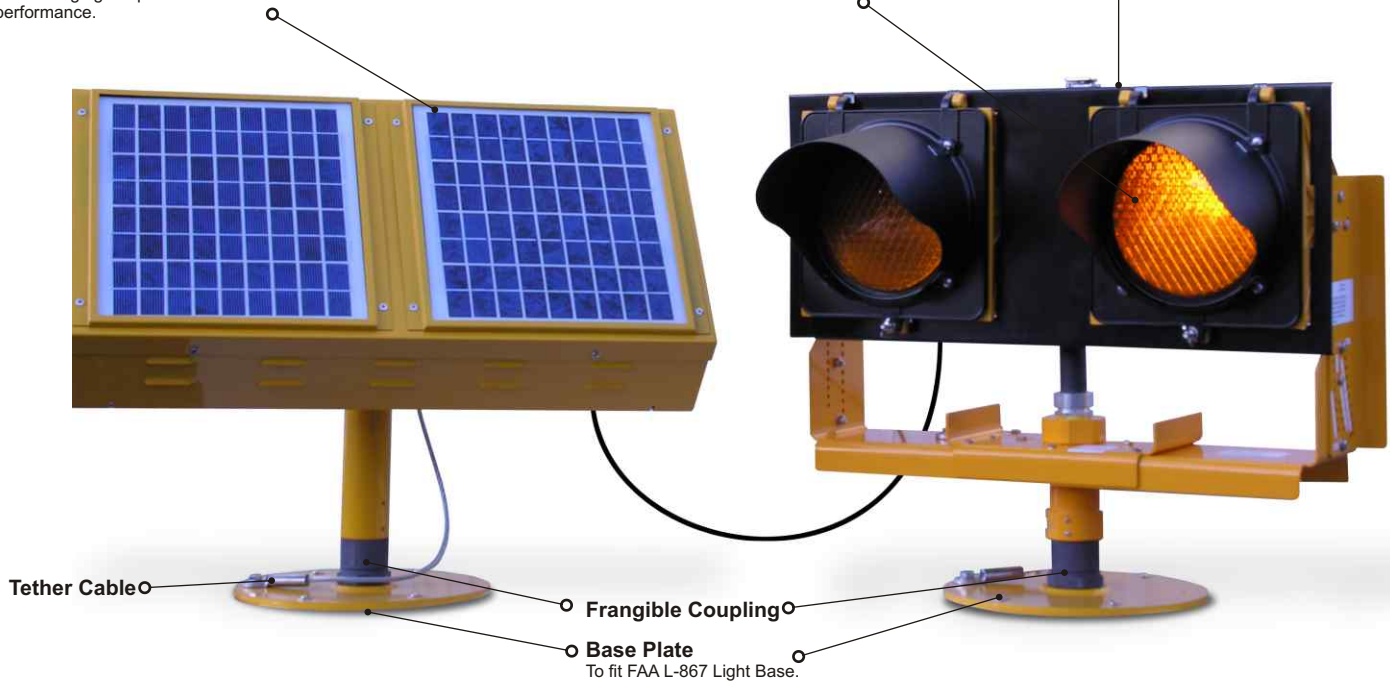
An advanced energy management system manages light output and solar charging to optimize unit performance.

## Amber LED Lamps

Up to 100,000 hours lifespan. with no bulbs to replace, ever.

## Lamp Housing

Horizontally and vertically adjustable.



## Built to Perform

Carmanah's Elevated Runway Guard Light (ERGL) is a 24 hour flashing, unidirectional LED lamp fixture combined with a remotely mounted solar engine. It is designed to satisfy the structural and environment requirements of FAA Advisory Circular 150-5345-46B (L-804) and ICAO Annex 14 using solar power.

The ERGL is designed to operate flawlessly through the hottest summers and coldest winters. It delivers reliable performance in the harshest environments while withstanding extreme temperatures, rain, snow, ice, standing water, and wind velocities up to 300 mph (482 km/h).

## Innovative Solar Design

The ERGL is built using Carmanah's patented energy management system (EMS), a technology developed and refined for over a decade and proven in more than 250,000 installations in 110 countries.

The energy management system is user configurable to produce a high, medium, or low intensity light output with automatic nighttime dimming to suit deployment in various solar environments.\*

\* Actual intensity may vary due to Automatic Light Control (ALC). Light intensity adjustments allow for optimum optical performance and battery life in the deployment location - consult Carmanah for details.

## Complete Solution

The ERGL solar engine contains the energy management system, solar panels and batteries. It is located on a robust tilting mount which is field adjustable between zero and sixty degrees to suit deployment at various latitudes.

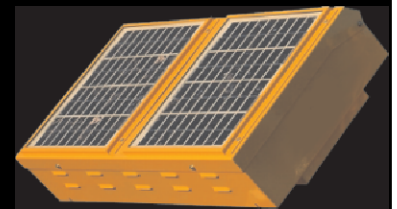
The system allows for up to twenty feet of mounting distance between the light housing and the solar engine. Both the solar engine and lamp housing base plates are designed to connect directly to standard FAA L-867 light bases. Frangible couplings and tether cables are designed to conform to FAA Advisory Circular 150-5345-46B (L-804). The ERGL requires no external power, cabling, or trenching reducing operating and installation costs.

## Quality is Assured

Carmanah manufactures in accordance with ISO 9001:2000 Quality Standards. The ERGL is backed by a 3-year warranty.



0-60° Solar Engine Pivot



Solar Engine



Amber LED Lamps

CHANGE THE WORLD WITH US™



# Solar-Powered Elevated Runway Guard Light - ERGL



## SPECIFICATIONS

### LIGHT OUTPUT

Available Daytime Settings (Approximate Intensity)	High (100cd), Med (65cd), Low (25cd)*
Corresponding Nighttime Settings (Approximate Intensity)	High (30cd), Med (20cd), Low (8cd)*

### OPERATION

Flash pattern	45-50 Flashes per minute
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### LED SIGNAL MODULE

Standard	ITE VTCSH-STD Part 2 Compliant
Size	8" (200 mm) diameter
Color	Amber

### ENVIRONMENTAL

Optimal ambient range	-4° to 77° F (-20° to +25° C)
Maximum ambient temperature range	-67° to 176° F (-40° to +80° C)
Solar requirements: maximum installation latitude	55 Deg N / S

### ENERGY MANAGEMENT SYSTEM

Operation capacity without solar charging	Variable depending on battery level and light intensity
Daily operation profile	24 hours with night intensity 30% of day intensity

### MOUNTING HARDWARE

Standard	0-60° Tilting solar engine mount
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### CONSTRUCTION

Finish	Aviation yellow
Weight	Lamp Housing 50lbs (23kg) Solar Engine 85lbs (39kg)

### QUALITY STANDARDS

Quality certification	ISO 9001:2000 Certified Manufacturer
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### WARRANTY

3 year pro-rated warranty on entire system including batteries

\* Actual intensity may vary due to Automatic Light Control (ALC). Light intensity adjustments allow for optimum optical performance and battery life in the deployment location - consult Carmanah for details.  
All specifications are subject to change without notice.



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