carmanah®
we put solar to work

R829-G

Schedule Based Solar Flashing Beacon for School Zones

- ITE Intensity Compliant solar system
- Supports time switch programming
- Solar panel and battery sized to meet location demands
- Proven technology platform
- MUTCD Compliant

Improves Safety

The R829-G meets ITE intensity requirements for flashing beacons. Research shows flashing beacons decrease vehicle speeds by five to seven miles per hour in school zones and improve driver awareness by increasing sign visibility.

Time Switch Ready

Compatible with Applied Information AI-500-070 or RTC AP-22 time switch with optional M2M cellular modem.

Advanced User-Interface

The R829-G features an on-board user interface and display that provides quick configuration and status monitoring.

Reliable

Designed with Carmanah's industry leading solar modeling tools to provide dependable year-after-year operation. The purpose-built, energy management system (EMS) ensures reliable operation, even during cloudy conditions. The R829-G is custom configured for optimum performance based on location, solar insolation and application requirements and is designed to withstand vandalism and extreme weather.

Cost-effective Solution

Solar eliminates the costs of trenching, wiring and grid power connections. Quick installation minimizes traffic disruptions. Low maintenance for reduced servicing cycles and zero operational costs.
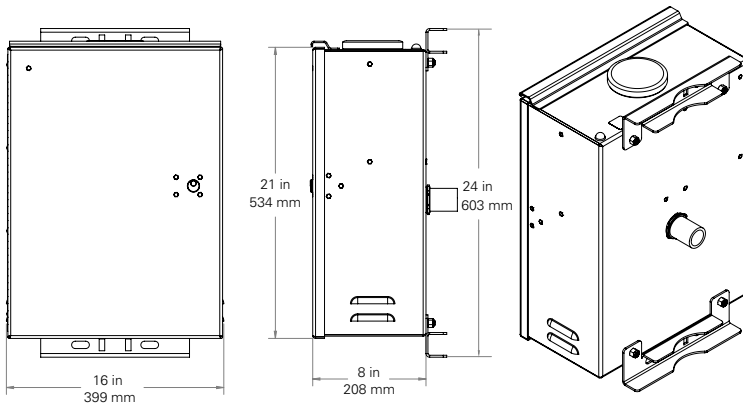
Trusted

With thousands of installations in the field, Carmanah solar beacons and solar LED lights have become the benchmark in traffic applications worldwide.
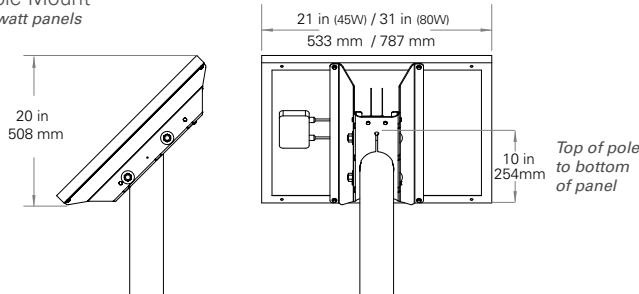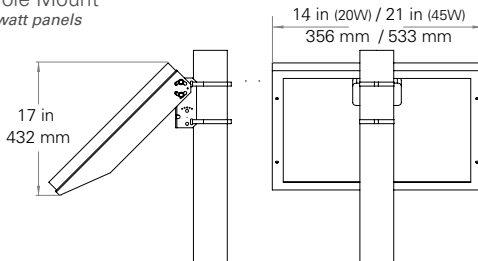
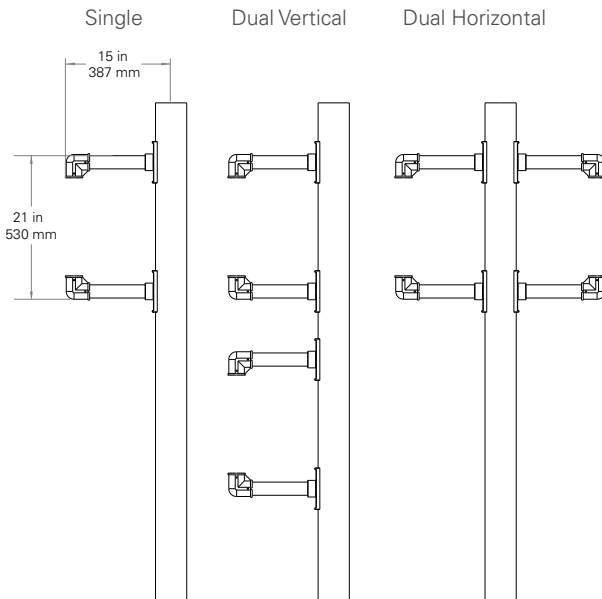**REPRESENTED IN YOUR REGION BY:**

R829-G

SOLAR LED SCHOOL ZONE FLASHING BEACON

CABINET DIMENSIONS

21 in
534 mm

24 in
603 mm

16 in
399 mm

8 in
208 mm

SOLAR PANEL MOUNTS

Top of Pole Mount
45 and 80 watt panels

20 in
508 mm

21 in (45W) / 31 in (80W)
533 mm / 787 mm

10 in
254 mm

Top of pole to bottom of panel

Side of Pole Mount
20 and 45 watt panels

17 in
432 mm

14 in (20W) / 21 in (45W)
356 mm / 533 mm

FIXTURE MOUNTS

Single   Dual Vertical   Dual Horizontal

15 in
387 mm

21 in
530 mm

SPECIFICATIONS

On-Board User Interface (OBUI)	Adjustable, auto-scrolling LED display
	Night dimming configuration
	System test, status and fault detection
Optical	MUTCD Compliant*; alternate and unison flash pattern
	ITE VTCSH** LED circular signal supplement standard including intensity
	Single or dual 12 in (305 mm) or 8 in (203 mm) diameter LED module, yellow
	Dominant wavelength: 590 nm (yellow)
Energy Collection	High-efficiency photovoltaic module: 20, 45 or 80 watts
	Maximum power point tracking with temperature compensation (MPPT-TC) for optimal energy collection in all solar conditions
Energy Storage	Replaceable, recyclable best in-class 12V battery system; Sealed, maintenance-free
	Battery sizes: 35, 75, 110 Ah
	Designed for minimum 5 year battery life
Cabinet Construction	Weatherproof, vented cabinet for ambient air transfer (NEMA 3R)
	Hinged door with industry standard # 2 lock
	Side pole mounting to standard 4.5 in (114 mm) poles
	Color: black or natural finish
	Pre-wired assembly designed to minimize installation time
Programming	Compatible with third party time switches: • Applied Information AI-500-070 • RTC AP-22 with optional M2M cellular modem
Environmental	Operating temperature (excluding battery): -40 to 176˚F (-40 to 80˚C)
	Battery temperature: -4 to 122˚F (-20 to 50˚C) extended temperature battery optional
Warranty	3-year limited warranty

* Meets all requirements for design, illumination, and color of signal sections required by 2009 MUTCD, Chapter 4L, Flashing Beacons (MUTCD: Manual on Uniform Traffic Control Devices).

**Meets ITE Intensity when configured and applied as recommended.

Pb

FCC

The management system governing the manufacture of this product is ISO 9001:2008 certified.

NATIONAL COMPLETE STREETS COALITION

Buy American Act Compliant

ASSEMBLED IN THE UNITED STATES

Specifications subject to local environmental conditions.
Specifications may be subject to change.
US Patent No 6,573,659, Other patents pending.
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