

MODEL

# R829 SERIES

SOLAR LED SCHOOL ZONE FLASHING BEACON

### Typical Applications:

- School zones

### Improves Safety

- Research shows flashing beacons decrease vehicle speeds by five to seven miles per hour in school zones
- Improves driver awareness by increasing sign visibility

### Reliability Assured

- Core energy management system ensures operation; even during periods of cloud cover
- Turn-key system custom configured for optimum performance based on location, solar insolation and desired operation
- Safe from vandalism and extreme weather

### Cost-Effective Solution

- No trenching, wiring or digging required
- "Plug-and-play" installation for reduced disruption to traffic
- Cabinet-free, sturdy design inhibits vandalism
- Zero operational costs

### Easy Installation and Operation

- Controlled via a Windows-based calendar software program capable of turning systems on and off several times per day
- Pre-set for up to 500 days of operation, based on school calendar
- Beacon schedule easily copied to multiple beacons
- Installs to existing sign posts within thirty minutes
- Easy to relocate and repurpose to other locations

### Quality Ensured

- Manufactured in accordance with ISO 9001:2008
- Designed and assembled in North America
- Backed by a 3-year limited warranty



INSTALLATIONS AND APPLICATIONS



SCHOOL ZONE WARNING -  
COLUMBIA, SC



SCHOOL ZONE WARNING -  
NEW ORLEANS, LA



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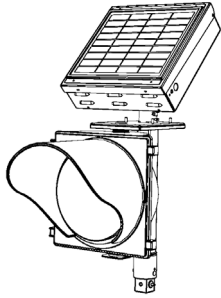
- visit us at [www.carmanah.com](http://www.carmanah.com)
- or call +1.250.380.0052 (toll-free US & Canada 1.877.722.8877)

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## MOUNTING EXAMPLES

### SINGLE BEACON (C-Compact)

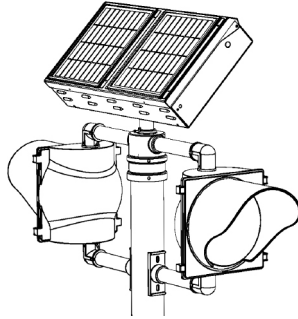
Single - Pole Mount (Square/Round)



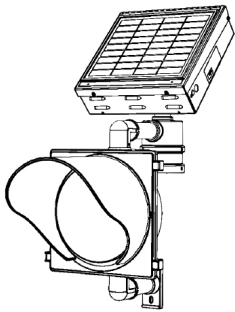
Single - Top of Pole Mount

### DUAL BEACON

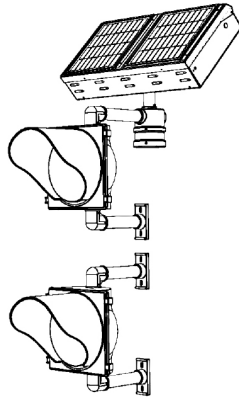
Dual - Horizontal Top Pole Mount



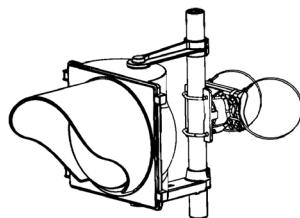
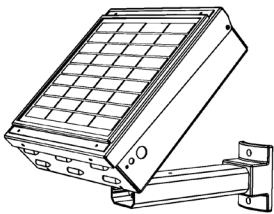
Dual - Vertical Top Pole Mount



Single or Dual - Side of Pole Mount



Single or Dual - Mast Arm Mount



\* OTHER MOUNTING OPTIONS AVAILABLE  
PRODUCT MAY NOT BE EXACTLY AS SHOWN

COMPONENT	DIMENSION		
	Length	Width	Height
Single Beacon	25.0" (635 mm)	15.0" (381 mm)	33.5" (851 mm)
10 W Engine	15.0" (381 mm)	14.8" (376 mm)	4.8" (121 mm)
20 W Engine	15.75" (401 mm)	29.3" (743 mm)	6.0" (151 mm)

\* Dimensions may vary based on pole selection, 45° tilt and beacon configuration.

Performance is tied to solar availability and geographic location.  
All specifications are subject to change without notice.



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US Patent No 6,573,659, Other patents pending. "Carmanah" and Carmanah logo are trademarks of Carmanah Technologies Corp.

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SOLAR LED SCHOOL ZONE FLASHING BEACON

### OPERATION

Flash pattern	MUTCD* compliant Alternate, unison, and quick-flash
Control	Embedded calendar, override switch box

### LED SIGNAL MODULE

Standard	ITE VTCSH LED circular signal supplement
Size and LED colour	12" (305 mm) diameter amber or red 8" (203 mm) diameter amber or red

### ENVIRONMENTAL

Operating temperature range	5 to 122° F (-15 to 50° C)
Extended temperature range (optional)	-40 to 122° F (-40 to 50° C)

### ENERGY MANAGEMENT SYSTEM

Battery lifespan	3 - 5 years (field replaceable)
Capacity without solar charging	Up to 30 days typical (location dependent)
Daily operation profile	Up to 12 hours per day (configuration dependent)
Automatic light control (ALC)	Systems continue to provide useful light during extreme conditions that prevent charging over an extended period of time

### PROGRAMMING

Activation	Upload activation schedule for up to 500 days. Download schedule for verification.
Duration	Schedule event times

### MOUNTING HARDWARE

Bracket options for standard sign posts	1.75" (45 mm) square telspar, 2 3/8" (60 mm) round, 4 1/2" (114 mm) round Pelco traffic signal mounting hardware
Colour	Black, yellow or green
Wind load rating	178 km/h (110 mph) **

### COMPONENTS

Solar Panel	High-efficiency 10 W (C-Compact) or 20 W panel
Battery	Replaceable, recyclable best-in-class battery pack. Sealed, maintenance-free.
Light Source	Ultra-bright LEDs featuring innovative optic and lens design for optimum light divergence
Construction	Fully self-contained weather, corrosion and vandal-resistant unit with premium-grade UV-resistant head

### QUALITY STANDARDS

Quality certification	ISO 9001:2008 Certified Manufacturer
Certification	NCHRP 350, FDOT, system compliant with Buy American Act

### WARRANTY

Term	3-year limited warranty (including batteries)
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\* Meets all requirements for design, illumination, and colour of signal sections required by MUTCD, chapter 4D.18. MUTCD: Manual on Uniform Traffic Control.

\*\* 3 second gust as per AASHTO 2001.