Schedule-based, solar school zone flashing beacon

- Decreases vehicle speeds by five to seven miles per hour in school zones
- Industry-leading high-intensity light output
- Compact, lightweight design to simplify installation
- Simple, software-based calendar program or programmable time clock operation
- Proven technology platform
- Meets and exceeds MUTCD requirements

**Superior Design and Technology**
The R829-F utilizes a self-contained solar engine integrating the Energy Management System (EMS) with an on-board user interface, housed in a compact enclosure together with the batteries and solar panel. A larger solar engine enables the R829-F to work with third-party time clocks and remote monitoring, as well as operate at higher intensities in challenging environments.

**Easy Installation**
With its highly efficient and compact design, installation is quick and uncomplicated, dramatically reducing installation costs. Retrofitting can be done where existing sign bases are used to enhance existing school zones and speed limit signs in minutes, and new installations can be completed without the cost of larger poles, new bases, and trenching.

**Calendar Operation**
Schedule beacon operation with our easy software-based calendar program, or use third-party time clocks for local or remote control.

**Advanced User Interface**
The R829-F comes with an on-board user interface for quick configuration and status monitoring. It allows for simple in-the-field adjustment of flash pattern, duration, intensity, ambient auto adjust, night dimming, and many more. Optional wireless connection enables one beacon’s calendar settings to control multiple school zone beacons.

**Reliable**
Designed with Carmanah’s industry-leading solar modeling tools to provide dependable year-after-year operation.

**Trusted**
With thousands of installations, Carmanah's beacons are the benchmark in traffic applications and other transportation applications worldwide.
**R829-F**
**SOLAR SCHOOL ZONE FLASHING BEACON**

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**DIMENSIONS**

*Other solar engine and beacon mounting configurations are available.*

- **Side View**
  - 16.0" (40.6 cm)
- **Bottom View**
  - 4.7" (11.9 cm)
- **2.0" - 2.5" Perforated Square Pole Mount**
- **2.38" - 2.88" Diameter Round Pole Mount**
- **4.0" - 4.5" Diameter Round Pole Mount**
- **Side Pole Mount**

**SOLAR ENGINE MOUNTING**

- **Single** - Integrated Engine and Beacon
- **Dual** - Vertical
- **2.0" - 2.5" Perforated Square Pole Mount**
- **2.38" - 2.88" Diameter Round Pole Mount**
- **4.0" - 4.5" Diameter Round Pole Mount**
- **Side Pole Mount**

**BEACON MOUNTING**

- **Single**
  - Integrated Engine and Beacon
  - Single
  - Dual - Vertical
  - Dual - Horizontal Back-to-back
  - Quad - Horizontal

**On-Board User Interface (OBU)**

- **Intensity setting**: 20 to 1400 mA for multiple circular beacons, RRFBs, or LED enhanced signs
- **Nighttime dimming**: 10 to 100% of daytime intensity
- **Ambient Light Adjust**: increases intensity during bright daytime
- **Automatic Light Control**: reduces intensity if the battery is extremely low
- **Temperature correction**: yellow or red beacons
- **Calendar**: internal time clock function
- **Radio settings**: enable/disable, selectable channel from 1 to 14
- **Output**: enabled when beacons flashing daytime and nighttime, or nighttime only
- **Activation counts and data reporting via OBU or optional USB connection**

**Environmental**

- **Solar Engine Construction**
  - Lockable, hinged lid for access to on-board user interface and batteries
  - Corrosion-resistant aluminum with stainless steel hardware
  - Raw aluminum finish or yellow, black, or green powder coated
  - Powdered to minimize installation time
  - High-efficiency optics and EMS = the most compact, lightweight system
  - 39 lb (17.7 kg) including batteries, excluding beacons and push button

- **System test, status, and fault detection**: battery, solar, button, beacon, radio, day/night
- **Flash patterns**: RFB1 (WW+S), RFB2 (WSDOT), 0.5 sec. alternating (MUTCD), 0.5 sec. unison (MUTCD), 0.1 sec. unison, 0.25 sec. unison, 0.1 sec. x3 quick flashes unison, 0.1 sec. x3 quick flashes alternating
- **Input**: momentary for push button activation, normally open switch, normally closed switch
- **Flash duration**: 5 sec. to 1 hr.
- **Activation**
  - **Manual override switch**: allows local control of beacons
  - **Junction box**: lockable, hinged door, corrosion-resistant aluminum enclosure allows easy calendar programming and access to manual override switch

**Specifications subject to local environmental conditions, and may be subject to change.**

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

US Patent No 6,573,659, Other patents pending. “Carmanah” and Carmanah logo are trademarks of Carmanah Technologies Corp. © 2018, Carmanah Technologies Corp.

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