R838

Wireless Beacon Controller

carmanah®

Local wireless beacon control for fire stations, emergency vehicle warnings, inspection and weigh stations, snow and chain-up service signs, and more.

Vehicle warning systems improve safety by increasing driver compliance and yield rates to station-exiting emergency vehicles.

- ✔ Alert drivers on demand with remote flashing beacon activation
- ✔ Compact, out-of-the-box designed to simplify installation
- ✔ Momentary or latching ON/OFF pushbutton activation with flash pattern (yellow) and power (red) confirmation lights
- ✔ Highest intensity beacon output in the industry
- ✔ MUTCD and Buy America compliant

R838 CONTROLLER wirelessly controls beacons from up to 1000 ft away

Versatile Design
Multiple configurations and methods of activation make the R838 controller an effective solution for a wide range of applications and environments.

Easy Installation
With its compact and robust design, installation is quick and easy. The R838 system ships ready to install with preconfigured activation and flash duration settings. The controller can easily be wall-mounted with common tools or used portably.

Advanced Controller Interface
The R838 controller comes with an on-board user interface for quick configuration and status monitoring. Beacon flash duration, night dimming, and ambient auto-adjust for overcast days can be configured in the field. Settings are automatically sent wirelessly to all beacon units in the system.

Reliable Operation
Designed with Carmanah's industry-leading solar modeling tools to provide dependable year-after-year operation. We prepare an Energy Balance Report (EBR) for every location.

Trusted for 20+ Years
With thousands of installations, Carmanah's systems are the benchmark in traffic applications and other transportation applications worldwide.

R820-E FLASHING BEACONS warn drivers of station-exiting emergency vehicles
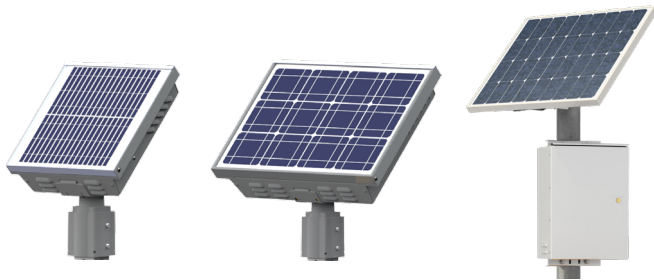
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FLASHING BEACON ENGINES

R820-E
Compact, 15w integrated solar engine

R820-F
Large, 30w integrated solar engine

R820-G
Cabinet-based, 20w, 50w, and 80w solar and AC systems

SOLAR ENGINE MOUNTING

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

EXAMPLE CONFIGURATIONS OF R838 BEACON

R820-E Engine, Dual Horizontal Beacons, WC-25 Sign

R820-E Engine, Dual Horizontal Beacons, W11-8 and WB-102AT Signs
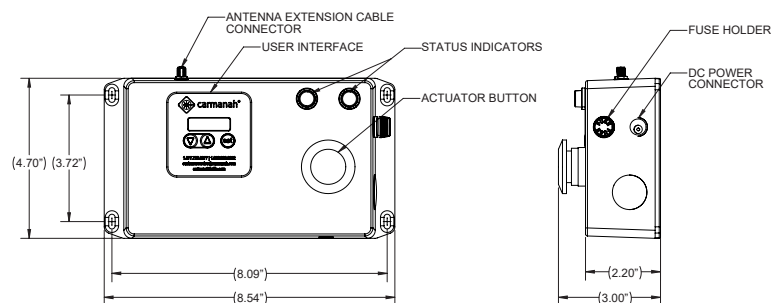

FLASHING BEACON SPECIFICATIONS

Optical	MUTCD compliant: 2009 MUTCD, Chapter 4L, Flashing Beacons, Manual on Uniform Traffic Control Devices (MUTCD)
	ITE VTCSH-LED Circular Signal Supplement compliant: meets ITE or 1.7x ITE intensity when used as recommended
	12 in (305 mm) or 8 in (203 mm) diameter LED modules, yellow or red
	High-power LEDs: +90% lumen maintenance (L90) based on IES LM-80
	Yellow, black, or green signal heads in UV-resistant polycarbonate or aluminum

CONTROLLER SPECIFICATIONS

On-Board User Interface (OBUI)	Adjustable system settings with auto-scrolling LED display on our latest EMS
	System test, status, and fault detection: button, radio
	Flash patterns: 5 sec. to 1 hr.
	Calendar: internal time clock function
	Flash duration: 5 sec. to 1 hr.
	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 OBUI or optional USB connection
Connectivity	Encrypted, wireless radio with 2.4 GHz technology
	Wireless update of settings from any unit to all systems on the same radio channel
	User-selectable multiple channels to group different beacons and ensure a robust wireless signal
	Communicates with all other GenIII-U and GenIII radio-enabled systems including our R820-E, R820-F, and R820-G beacons
	Instantaneous wireless activation: <150 ms
	Wireless range: 1000 ft (305 m)
	Integrated, vandal-resistant antenna
	Extension antenna available
Power System	AC: 15 VDC
Power Supply	AC: 120 VAC to 15 VDC wall adapter (included)
Controller Construction	Corrosion-resistant aluminum with stainless steel hardware
	Raw aluminum finish or black powder coated
	Prewired to minimize installation time
	High-efficiency optics and EMS = the most compact, lightweight system
	4.7" H x 8.54" W x 3" D (11.9 x 21.7 x 7.6 cm)
Mounting Options	Wall mount or vehicle-mounted
Environmental	-40 to 140° F (-40 to 60° C) system operating temperature
Activation	Momentary pushbutton
	Latching pushbutton
	8 flash patterns available
Warranty	**5-year limited warranty**

R838 CONTROLLER DIMENSIONS