carmanah®
we put solar to work

MODEL

R920 SERIES

RECTANGULAR RAPID FLASHING BEACON

Pedestrian-actuated warning system for uncontrolled marked crosswalks

RRFBs have been found to provide vehicle yielding rates between 72 and 96 percent for crosswalk applications, including 4 lane roadways with average daily traffic (ADT) exceeding 12,000*.

Superior Design and Technology
The R920 utilizes a self-contained solar engine integrating the energy management system with an on-board user interface, housed in a compact enclosure together with the batteries and solar panel. In low light conditions, the ambient auto-adjust option provides over-lighting protection and system efficiency.

Easy Installation
With its highly efficient and compact design, installation is quick and uncomplicated, dramatically reducing installation costs. Retro-fitting can be done where existing sign bases are used to enhance existing marked crosswalks in minutes, and new installations can be completed without the cost of larger poles and bases.

Advanced User-Interface
The R920 is the first RRFB with an on-board user interface and display for quick configuration and status monitoring. It allows for simple in-the-field set-up adjustment to flash duration, ambient settings, and night intensity. Settings are broadcasted automatically to all units in the system.

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

Trusted
With thousands of installations in the field, Carmanah solar beacons and solar LED lights have become the benchmark in traffic applications and other transportation applications worldwide.

ISO 9001

Pb

Bronze Partner Complete Streets

* U.S. Department of Transportation Federal Highways Administration, Publication No. FHWA-HRT-10-043 - "Effects of Yellow Rectangular Rapid-Flashing Beacons on Yielding at Multilane Uncontrolled Crosswalks"

The R920 is the new benchmark for Rectangular Rapid Flashing Beacons (RRFBs):

- Ultra-efficient optical and Energy Management Systems (EMS)
- Compact design to simplify installation
- Proven technology platform
- Exceeds FHWA standards

Carmanah is backed by a worldwide network of distribution partners.
To find a representative in your region:

- visit us at **www.carmanah.com**
- or call +1.250.380.0052 (toll-free US & Canada 1.877.722.8877)

REPRESENTED IN YOUR REGION BY:

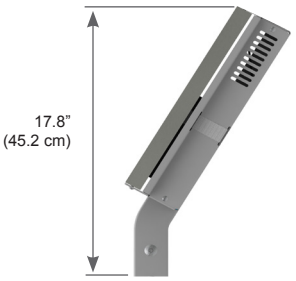
MODEL

R920 SERIES

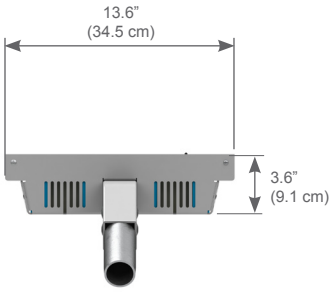
RECTANGULAR RAPID FLASHING BEACON

DIMENSIONS

Side View

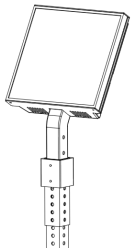


Bottom View

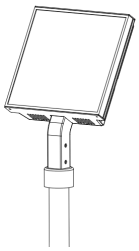


MOUNTING OPTIONS

2", 2.5" Perforated Square Post Mount



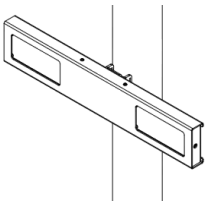
2 3/8" - 2 7/8" Diameter Round Post Mount



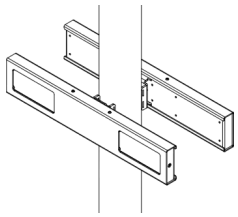
4" - 4 1/2" Diameter Round Post Mount

SYSTEM CONFIGURATION

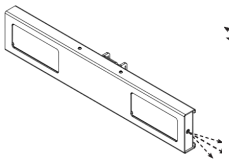
Uni-directional Configuration



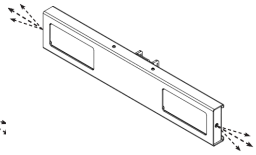
Bi-directional Configuration



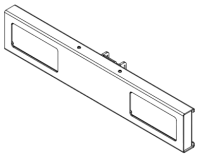
LIGHTBAR OPTIONS



Side-emitting Pedestrian Confirmation Light (One End)

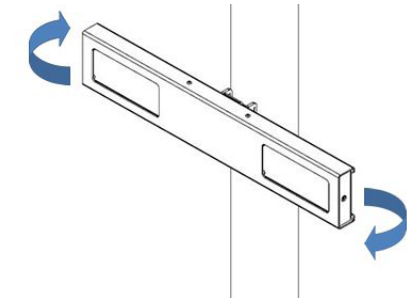


Side-emitting Pedestrian Confirmation Light (Both Ends)



No Side-emitting Pedestrian Confirmation Light

IN THE FIELD AIMING



Rotate the lightbar towards the incoming vehicle lane, independent of the wire hole location.

SPECIFICATIONS

On-Board User Interface (OBUI)	Adjustable, auto-scrolling LED display
	Field-configurable flash duration to one second increment
	Ambient auto-adjust configuration
	Night dimming configuration
	Wireless update of configurable settings from any unit to all systems
	Channel selection
	System test, status and fault detection
	Activation data reporting
Optical	MUTCD IA-11 compliant flash pattern
	3" x 7" amber LED Indications
	Exceeds SAE J595 class 1 Intensity
	Meets SAE J595 chromaticity
	High-power LEDs meets 90% lumen maintenance (L90) based on IES LM-80
Energy Collection	10 watt high-efficiency photovoltaic cell with blocking diodes
	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 dual battery system (sealed, maintenance-free)
	Designed for minimum 5 year battery life
	Lightweight for ease of handling
	Quick connect terminals and strapping for efficient installation
Solar Engine Construction	Weatherproof, vented solar engine enclosure for ambient air transfer
	Hinged access lid for access to on-board user interface and batteries
	Compact, lightweight aluminum housing
	Top of pole mounting to standard 2" sign posts and 4" poles
	Pre-wired assembly designed to minimize installation time
	Weight: 19.8 lb (9 kg) including batteries, excluding light bars and pushbutton
Lightbar Construction	Premium, UV-resistant polycarbonate lens
	Waterproof IP 67 LED Indications
	Two-piece mounting bracket to facilitate mounting back-to-back lightbars
	Horizontal rotation adjustment for in-the-field aiming of lightbar
	Dimensions: 24" L x 1.5" W x 4" H (61.0 cm L x 3.8 c m W x 11.4 cm H)
Operating Performance	Rated for 300, 20 second activations per day, year-round operation with a minimum of 0.94 sun hours
	Patented automatic light control (ALC) technology provides over 30 days of rated operation without charging
	Wireless activation within 120 mS
	Wireless range of 500 ft (152 m)
Quality Certification	ISO 9001:2008 Certified Manufacturer
Warranty	3-year limited warranty

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

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