carmanah®
we put solar to work

MODEL

R820 SERIES
SOLAR LED CROSSWALK FLASHING BEACON

Typical Applications:
Pedestrian crosswalks

Improves Safety
- Improves pedestrian safety by increasing driver awareness at uncontrolled crosswalks
- Communicates wirelessly to other beacons using advanced RF communication to eliminate further wiring
- Capable of multiple beacons per system
- Pedestrian-activated push-button

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

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

Easy Installation and Operation
- 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

PEDESTRIAN CROSSWALK - VICTORIA, BC

PEDESTRIAN CROSSWALK - SANTIAGO, CHILE

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)

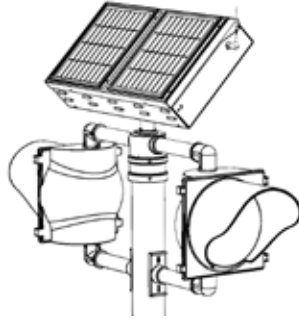REPRESENTED IN YOUR REGION BY:

MOUNTING EXAMPLES

SINGLE BEACON (C-Compact)
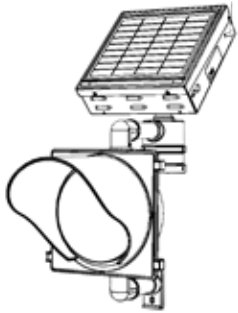
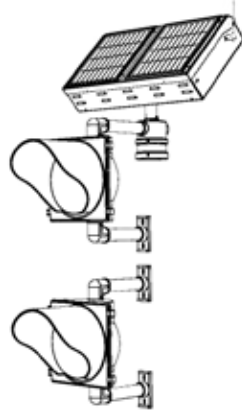Single - Pole Mount (Square/Round)

Single - Top of Pole Mount

Single or Dual - Side of Pole Mount
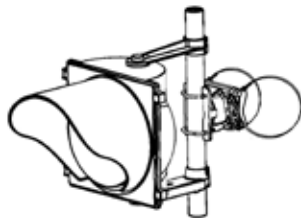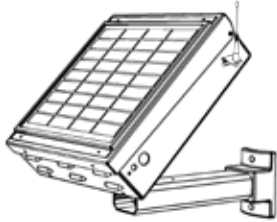

DUAL BEACON

Dual - Horizontal Top Pole Mount

Dual - Vertical Top 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

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OPERATION

Flash pattern and activation	MUTCD* compliant Alternate, unison, and quick-flash
Control	Push button

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

ENVIRONMENTAL

Operating temperature range	5 to 122˚ F (-15 to 50˚ C)

ENERGY MANAGEMENT SYSTEM

Battery lifespan	3 – 5 years (field replaceable)
Capacity without solar charging	Up to 40 days typical (location dependant)
Daily operation profile	Up to 12 hours (system configuration dependent)
Automatic light control (ALC)	Systems continue to provide useful light during extreme conditions that prevent charging over an extended period of time

WIRELESS ACTIVATION

Activation	Push button activation sends wireless signal to all units
Duration	10 – 60+ second flash duration (adjustable by 5 second increments)
Frequency	902-928 Mhz ISM Band FHSS (frequency hopping spread spectrum)
Effective range	165 ft (50 m) line of sight

MOUNTING HARDWARE

Bracket options for standard sign posts	1.75" (45 mm) square telspar, 2 ⅜" (60 mm) round, 4 ½" (114 mm) round Pelco traffic signal mounting hardware
Colour	Black, yellow or green

COMPONENTS

Solar Panel	High-efficiency 10 W (C-Compact) or 20 W panel
Battery	Replaceable, recylable 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)