SC315-G-HUB

StreetHub™ Connected RRFB Crosswalk System

carmanah®

Rectangular rapid flashing beacons (RRFBs) improve pedestrian safety by increasing yield rates to 72-96% at crosswalks.*

- The benchmark for RRFBs, the SC315-G-HUB meets MUTCD requirements, including IA-21, and is Buy America compliant
- Audible push button or passive pedestrian activation
- Energy Balance Report™ (EBR) prepared for every location

Built-in wireless connectivity allows for remote data collection and beacon health monitoring, ensuring optimal safety, minimal downtime and fewer service calls and site visits.

- Monitoring unit upgrades and over-the-air software and security updates included
- Extended battery warranty matched to connectivity and support plan
- Backup battery ensures uninterrupted data collection and connectivity
- Powered by applied INFORMATION

SAFETY + CONTROL + INSIGHT

All-in-one System
The SC315-G-HUB combines Carmanah's reliable safety beacons with Applied Information's industry-leading intelligent transportation systems (ITS) solutions. An out-of-the-box system, the SC315-G-HUB ships ready to install with instant connectivity.

Remote Monitoring and Data Collection
Every SC315-G-HUB includes its own monitoring unit allowing for remote communication and collection of push button activations. System health can be monitored from the cloud-based Glance platform powered by AI, reducing site visits and saving departments time and money.

Timely Alerts
The SC315-G-HUB issues system status alerts 24/7 via text or email to reduce service calls, speed response times and improve safety by ensuring systems are working properly.

Automated and On-demand Reports
Connecting to Glance means users can quickly and easily access data and insights that enable accurate treatment analysis and proactive maintenance plans.

TravelSafely Mobile Safety App
TravelSafely is a pioneering smartphone app developed by AI that boosts safety by providing alerts and facilitating better communication between motorists, pedestrians, cyclists and infrastructure.

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

* 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"

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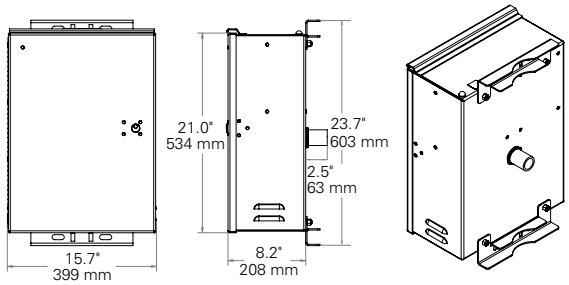
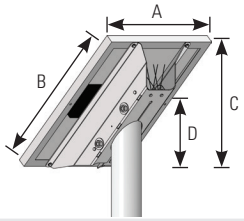
SOLAR ENGINE DIMENSIONS

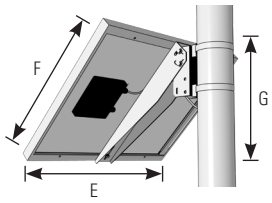


SOLAR ENGINE MOUNTING

4.5" Diameter Round Top of Pole Mount



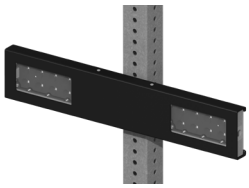
Side of Pole Mount



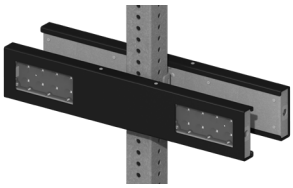
PANELS	A	B	C	D	E	F	G
20 W	-	-	-	-	13.6" (345 mm)	18.5" (470 mm)	13.8" (350 mm)
50 W	21.2" (538 mm)	26.3" (668 mm)	19.6" (497 mm)	10.0" (254 mm)	26.3" (668 mm)	21.2" (538 mm)	16.0" (405 mm)
80 W	30.7" (780 mm)	26.5" (672 mm)	19.7" (500 mm)	10.0" (254 mm)	30.7" (780 mm)	26.5" (672 mm)	19.7" (500 mm)

LIGHT BAR CONFIGURATION

Uni-directional Configuration



Bi-directional Configuration



ACTIVATION OPTIONS

Push Button

Audible Push Button Station

Passive Activation Sensor

CELLULAR CONNECTIVITY AND SOFTWARE SPECIFICATIONS

Monitoring Unit	**Applied Information AI-500-070B (AI-500-071 in Florida) monitoring unit** includes cellular modem with GPS, fully integrated and configured from the factory
	LTE wireless broadband network Hardware is upgradeable if service provider changes network requirements
	Prewired inputs and outputs to monitor beacon, solar panel, battery, and system status
	Unit connects to the network every 30 minutes to ensure uptime
	Over-the-air software and security updates
	Non-volatile memory storage and battery backup in case of system power loss
	Meets NEMA TS 8 requirements for Cyber and Physical Security for Intelligent Transportation Systems
Monitoring Platform	**Glance™ cloud-based platform for remote beacon monitoring** Compatible with desktop and mobile devices
	Stores detailed system data including battery status, solar panel voltage, push button activations, and more
	Configurable smart alerts through email and/or text of system issues
	Custom reports available
Connectivity and Support	1/2/3/4/5-year connectivity and support plans available

BEACON SPECIFICATIONS

Optical	MUTCD interim approval IA-21 and MUTCDC compliant
	Purpose-built light bar optics = maximum efficiency and no stray light Exceeds SAE J595 class 1 intensity by 2.5 to 3x when used as recommended Meets SAE J578 chromaticity
	3 in (76 mm) x 7 in (178 mm) clear, UV-rated polycarbonate lens with yellow LEDs
	High-power LEDs: +90% lumen maintenance (L90) based on IES LM-80
	Side-emitting pedestrian confirmation LEDs
	Independent, stainless steel mounting brackets make back-to-back installation simple and enable in-field aiming for maximum effectiveness
	Yellow, black, or green powder coated light bar covers
Beacon Communication	Available with 2.4 GHz radio for remote activation of additional systems
	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 Gen III radio-enabled systems including our R820-E, -F, and -G circular beacons
	Instantaneous wireless activation: <150 ms
	Wireless range: 1000 ft (305 m)
	Integrated, vandal-resistant antenna

SYSTEM SPECIFICATIONS

On-Board User Interface (OBUI)	Adjustable system settings with auto-scrolling LED display on our latest EMS
	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.
	Intensity setting: 20 to 1400 mA for multiple RRFBs, circular beacons, or LED enhanced signs
	Nighttime dimming: 10 to 100% of daytime intensity
	Ambient Auto 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 E.g., for relay control of overhead lighting
	Activation counts and data reporting via OBUI or optional USB connection
Power System	Solar or AC-powered
	AC: 90-264 VAC input, 6-14 AWG Replaceable AC-DC power supply, circuit breaker, terminal block wiring
Energy Collection	20, 50, or 80 W high-efficiency photovoltaic solar panel
	45 deg tilt for optimal energy collection
	Maximum Power Point Tracking with Temperature Compensation (MPPT-TC) battery charger for optimal energy collection in all solar and battery conditions
Energy Storage	12 V battery system with multiple sizes: 35, 55, 100 Ahr.
	Replaceable, recyclable, sealed, maintenance-free, best-in-class AGM batteries offer the widest temperature range and longest life
	Battery design life: +5 yrs.
Cabinet Construction	Weatherproof, gasketed enclosure with vents for ambient air transfer (NEMA 3R)
	Lockable, hinged door with #2 lock
	Corrosion-resistant aluminum with stainless steel hardware
	Raw aluminum finish or yellow, black, or green powder coated
	Prewired to minimize installation time
	High-efficiency optics and EMS = the most compact, lightweight system
Environmental	-35 to 165° F (-37 to 74° C) system operating temperature
	-40 to 140° F (-40 to 60° C) battery operating temperature
	150 mph (241 kph) wind speed as per AASHTO LTS-6
Activation	Push button: ADA-compliant, piezo-driven with visual LED and two-tone audible confirmation
	Audible push button station: ADA-compliant, piezo-driven with visual LED and customizable voice message confirmation
	Passive activation: microwave-based sensor detects pedestrian
Warranty	**5-year limited warranty, excluding batteries**
	Battery warranty matches selected connectivity and support plan

MUTCD IA-21

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.

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