

Solar Series Wireless Scheduled Beacons: 2400 Series

CE & UL CERTIFIED ELECTRICAL COMPONENTS



The Solar Series Wireless Scheduled Beacon Systems give end users the ability to pre-set and schedule all beacon operations and characteristics via website access or on-demand via mobile device with connection to the 3G / 4G cellular network. They are designed specifically for areas where traffic patterns can change at different times of the day such as school zones, playground areas and construction zones. The 2400 Series Beacons are completely autonomous, alleviating any need for external wiring, power inputs, trenching or cabling and can be installed in minutes. With various LED and Housing colors, System Sizes and Single or Dual Beacon set-up, the Solar Series Wireless Scheduled Beacons can be customized to meet the exact needs of each and every project.

APPLICATIONS

School Zones	Slow drivers down and keep them alert as they pass through school zones
Road Conditions	Alert drivers to weather alerts and other road status
Playground Zones	Remind drivers to slow down for playground zones

BENEFITS

High Quality	Designed and manufactured in North America
Clean Technology	Solar-powered and wireless to save on power bills and end roadway trenching
Flexible	Adjustable flash pattern to meet regulatory requirements
Reliable	Energy management system to ensure operation under all environmental conditions
Simple	Installs in minutes to minimize traffic disruption and allow for relocation and re-purposing
Elegant	Self-contained, cabinet-free, discrete design to enhance streetscapes and inhibit vandalism

SPECIFICATIONS

SYSTEM OVERVIEW

Certification	CE and UL certified electrical components
Compliance	FHWA MUTCD compliant FCC EMC Class A verified
Operation	Adjustable computer schedule and Mobile device activation
Flash Patterns	MUTCD (0.5 second on, 0.5 second off) or Tech High Visibility Strobe Pattern
Operation Temperature	-40°C to +74°C
Controller Input Voltage	12 V DC
Solar Panel	32-40 W nominal 12 V, CE and TUV certified
Battery Storage	AGM12V, 36Ah, UL certified, field replaceable, Optional cold weather battery upgrade
Alternate Power	AC / Solar hybrid available AC-Only available
Diagnostics	Reporting on diagnostic information including battery levels, activations, etc.

POWER MANAGEMENT

Rated Usage	120 mins of activation per day (average)
Charged Capacity	Up to 30 days at rated usage (without charging)
Auto Brightness	6 stages of brightness for different light conditions and battery levels
Customizable	Automatic brightness disabled on request
Self Monitoring	Visual notification of sub-optimal operation

LED MODULE

Standard	ITE VTCOSH-STD 2005
Lens	UV stabilized polycarbonate and Abrasion resistant
Size	8" or 12" diameter (200 mm or 300 mm)
LED color	● Amber
Additional LEDs	Optional tell tale LED (amber, approx 1" x 2") Optional additional signal head

COMMUNICATION-INTER-BEACON

Between Beacons	ISM spread spectrum radio, 902-928 MHz
Range	Up to 0.5 miles (800 m) with line of sight
Network Addresses	8 unique addresses to avoid interference between multiple crosswalk locations
Compatibility	All family beacons

COMMUNICATION - PRIMARY BEACONS

Incoming commands	Cell phone communication (requires 3G or 4G LTE cellular coverage, determined by modem type) or via direct connection
GPS	GPS, GNSS and GLONASS compatibility and Time synchronization

A primary beacon receives preset schedules from the Tech School Zone Scheduler website and receives instant activation messages from authorized cell phone users.

COMMUNICATION - SECONDARY BEACONS

Incoming Commands	Relies on the primary beacon's commands
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A secondary beacon relies on its primary beacon for all activation commands.

PHYSICAL DESIGN

Configuration	Fully self-contained
Color	Black, green or yellow Custom colors also available
Solar Engine	6061-T6 powder coated aluminum
Signal Housing	Polycarbonate
Weight	Approx — 66-72 lbs. (30-33 kg)
Available Mounting	Round pole: 3.5", 4.5" Square post: 4", 6", 4"x 6" Mid-pole side mount

WARRANTY

Warranty	5-year Limited Warranty for defects in workmanship and materials (excludes batteries and vandalism)
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"Urban Renewables is not responsible for interruptions or lack of communication quality with cellular carriers, nor are we responsible for termination of carrier services in a given area.