Wireless Outdoor Lighting Controller (TOP900 Series)

Product Description
Part of a Lumewave by Echelon® intelligent control system, the TOP900 Series is a wireless controller that installs directly to an exterior lighting fixture, providing remote monitoring and control. The TOP900TLX controller (pictured above) mounts to the NEMA standard ANSI C136.41-2013 twist-lock connector, typically installed by the fixture manufacturer. The TOP900TN has a threaded nipple and bare leads for use in some retrofits. The controller gathers data regarding the operational condition of lamps, energy usage, voltage, current, power factor, and fixture location that is transmitted over the Lumewave by Echelon control network and analyzed by the central management system (CMS) software.

Operation
With the controller, fixtures can be addressed and grouped for unified ON/OFF, high-low stepped dimming with OFF, or 0-10 volt continuous dimming operation. The TOP900 provides adjustable photocell thresholds as well as time of day and astronomical clock functionality. It can operate without a network connection, using onboard distributed intelligence, and it stores energy data for 31 days. The TOP900 supports peer to peer communications and over-the-air upgrades.

Features and Benefits
• Wireless communication for remote control and monitoring; supports adaptive lighting, flexible scheduling, maintenance reports, fault alerts and more
• Available for voltages from 120-480VAC
• Compatible with most lamp types, including LED, eHID, plasma, and induction
• Provides ON/OFF, bi-level or full range dimming control
• Power metering calibrated to 1% accuracy
• Built-in photocell for daylighting control
• Secure AES 128-bit encryption
• High end trim for enhanced energy savings
• Supports repeater functionality for optimal coverage
• Supports peer to peer communications
• Provides regular status updates to the CMS

| Project: |
| Date: | Detail: |
Product Specifications

Control parameters
- Control profiles and interfaces
  - Power to fixture ON/OFF
  - Bi-level with OFF
  - Continuous dimming control with OFF
- Control events and schedules
  - Weekday and weekend schedules
  - Up to eight control events per day
  - Scheduled events based on time of day and/or astronomical time
  - Scheduled use of motion sensors and photocell
  - Real-time commands and overrides
- Photocell daytime override
- Data logging
- Failure detection and reporting
- Photocell thresholds synchronization
- Over the air flashing (program updates)

Electrical and operational specifications
- Operating voltage: 100–480VAC, 50/60 Hz
- Power switching: 1000W
- Power consumption: <2W @ 120/277V; 3W @ 480V
- Operating temperature: -40°C to +70°C
- Surge protection: 345J
- Relay protection: Zero crossing
- Failsafe: Power ON, lamp level high
- Wireless communication: IEEE 802.15.4; 902-928 MHz
  - 10 channel DSSS (Direct Sequence Spread Spectrum)
  - RF power adjustable to +24 dBm (250 mW)
- Node to node range: TOP900 to TOP900, 1 mile+ (line of sight)
- Range extender: TOP900 can be used as repeater
- Input/interface: Motion sensor
- Outputs/interfaces: 0-10V (sink) dimming 12VDC

Safety, compliance and warranty
- IP66 certified
- FCC and IC approved
- UL 916/773 and Canadian C12.2 listed
- RoHS compliant
- 5 year limited warranty*

*Subject to terms and conditions found at http://echelon.com/lp/warranty_five_year

Dimensions and Wiring

Ordering # | Product Name | Product Description
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100118 | TOP900TLX-GRY | Wireless controller, NEMA standard ANSI C136.41-2013, 120-277V, grey
100125 | TOP900TLX-BLK | Wireless controller, NEMA standard ANSI C136.41-2013, 120-277V, black
100134 | TOP900TLX-480-GRY | Wireless controller, NEMA standard ANSI C136.41-2013, 120-277, 347/480V, grey
100135 | TOP900TLX-480-BLK | Wireless controller, NEMA standard ANSI C136.41-2013, 120-277, 347/480V, black
100106 | TOP900TN-GRY | Wireless controller, 1/2˝ threaded nipple, 120-277V, grey
100124 | TOP900TN-BLK | Wireless controller, 1/2˝ threaded nipple, 120-277V, black

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