Lumewave Base Station

Product Description
The Lumewave Base Station is comparable to the Lumewave Gateway, but with a bi-directional pole-mounted amplifier that doubles the range. Part of a Lumewave by Echelon® intelligent control system, the Base Station connects wireless lighting controllers with the central management system through an Ethernet link for LAN connections or a cellular link via an integrated modem. The Base Station supports up to 2,000 controllers over a range of up to 4 miles, line of sight, facilitating secure and robust network communication. Lumewave intelligent networks are designed to handle multiple Gateways and Base Stations for large scale deployment support.

Operation
The Base Station is housed in an IP66-rated NEMA 4x enclosure that can be pole- or wall-mounted. It uses a 900 MHz antenna that is connected via a lightning protected port, either affixed directly to the device or remotely mounted. All models operate from 120-240VAC at 50/60Hz. The Base Station is supplied with a secondary amplifier, with an extension cable, that is pole-mounted to extend the range of communication. The device is built on a powerful and scalable Linux-based platform with a built-in modem for cellular connection from multiple wireless carriers.

Features and Benefits
- Doubles the wireless range compared to a Lumewave Gateway using a bi-directional pole-mounted amplifier
- Ethernet link for LAN connection or cellular link via built-in modem
- Supports up to 2,000 controllers up to a 4-mile line of sight
- Secure AES 128-bit encryption for wireless data transmission
- External RF port for extended coax antenna runs
- Built-in lightning surge arrester on all antenna ports
- Wall or pole mount inside of UL IP66 rated polycarbonate enclosure
- Works in extended temperature range conditions without service interruptions

Typical Smart City or campus RF communication network.
Product Specifications

Wireless parameters

Network type: Star-mesh topology
Operating frequency: 902-928 MHz
RF Power: +30dBm
Range: 4 miles (6.4km), line of sight
Number of controllers supported: 2000

Connectivity

Cellular model: Multiple carriers
Ethernet model: 10/100 Ethernet

Mounting and operation

Housing: Polycarbonate with built-in pole mounting brackets
Mounting: Wall or pole
Dimensions: 17.6” x 13” x 4.1” (H X W x D)
Operating voltage: 120-240VAC, 50/60Hz
Temperature range: -30°C to +70°C

Safety, compliance and warranty

• IP66 certified
• NEMA 4x
• FCC and IC approved
• 5 year limited warranty*

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

Wiring Diagrams

Ordering # | Product Name | Product Description
--- | --- | ---
100142 | Lumewave Base Station - Ethernet | Ethernet connection gateway with bi-directional amplifier for range extension
100143 | Lumewave Base Station - Cellular | Cellular connection gateway with bi-directional amplifier for range extension