

LightGrid Wireless Control System

Mesh Gateway



Outdoor Lighting Control System Designed for Street and Roadway Applications. It enables remote monitoring, control, and asset management of a single fixture or a group of fixtures through a web enabled Central Management System.

- Optimized Energy Usage: *On/Off & Dimming*
- Query by Location: *Available Every 15 Minutes*
- Reduce and Streamline Repair Calls: *Day Burner/Dark Night Alerts*
- Accurate Energy Usage Measurement: *+/- 0.5% Accuracy*



System Architecture

Nodes reside on top of each light fixture on a standard ANSI socket and operate in a mesh network, communicating to each other as well as the gateway. **The Gateway** connects nodes to the Central Management System through a standard TCP-IP interface.

Why Mesh?

Mesh systems provide a cost-effective lighting controls solution in urban environments that typically have dense pole locations, because each gateway can support hundreds of nodes.

Product Features

- Communication hub for self-forming & self-restoring node mesh network to central command
- Built-in Cell Modem
- Integrated GPS for Automatic Gateway Registration and Location Display in Control Software
- Enhanced Surge Protection 10kV/5kA per ANSI C136.2-2015
- Real-time update of the status of all the fixtures
- Static IPv6 Addressing and Routing
- Industry Standard Secure Encrypted Communications

Product Specifications

Node Specifications:

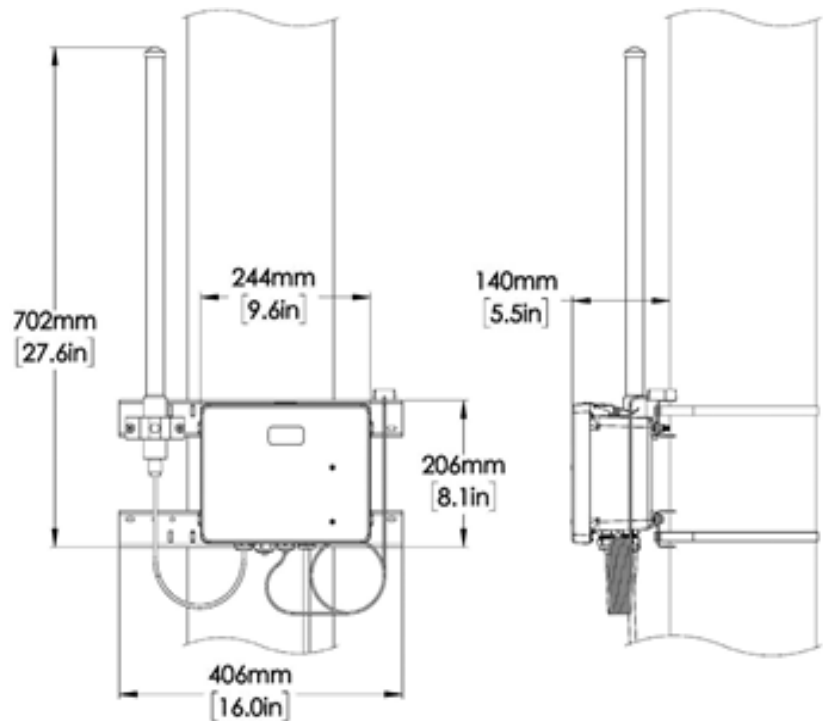
- Input Voltage: 120-480V
- Operating Temp: -40° to +50°C
- Surge Protection: 10kV/5kA Standard, per ANSI C136.2-2015
- Power Consumption: typical 4W
- GPS Accuracy: +/- 3m in clear open sky
- Addressing: IPv6 protocol
- Security: AES Encryption and Certificate Based Authentication

Housing & Construction:

- Ingress Protection: Class IP65
- Weight: 7 lbs
- Warranty: 5 Years Standard, 10 Year Extended

Network, Compliance & Security:

- Radio Frequency: 915 MHz ISM Band, FCC CFR 47 15.247 Intentional Radiators, ICES-005
- Network Communication: IEEE 802.15.4 6LoWPAN, 50 Channel FHSS
- EMI: Complies with FCC CFR 47 15.208, 15.209 and ICES-005 (B)/ NMB-005 (B)



Ordering Number Logic

ID	Voltage	Antenna	Location Option	GPS	Cellular Network	Network	Options
ELWG	0 = 120-277V	C = Standard 18	XX = Default	G = Default	M = Modem ATT	G	None = Default
					R = Modem Rogers		
					T = Telefonica		

*Units come programmed to mesh network A. Other networks are programmed to the unit at the time of activation.

Examples

ELWG0CXXGM – 120-277V, Standard Antenna, GPS Gateway with Modem configured for ATT, Network A



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