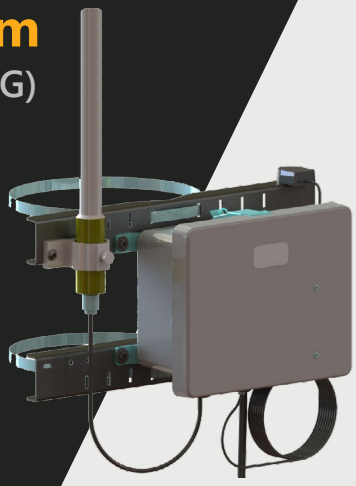
LightGrid™ Wireless Control System

Mesh Gateway (ELWG)



Project Name _____

Date _____ Type _____

Notes _____

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.

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.

Current offers an RF simulation to determine the optimal placement of where gateways will be installed to maximize the node to gateway connectivity.

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 up to 550 nodes.

- Optimized Energy Usage: *On/Off & Dimming*
- Query by Location: *Data is available every 15 Minutes but manual query is sent immediately.*
- Reduce and Streamline Repair Calls: *Day Burner/Dark Night Alerts allows the user to customize alarm configurations for added flexibility.*
- Accurate Energy Usage Measurement: *+/- 0.5% Accuracy*

PRODUCT FEATURES

Communication hub for self-forming & self-restoring node mesh network to central command
Built-in Cell Modem
Integrated GPS for 4G Gateway Registration and Location Display in Control Software
Enhanced Surge Protection 6kV/3kA 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
Ethernet Port Available

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a Daintree company

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Catalog Logic and Spec Tables

Project Name _____

Date _____ Type _____

Notes _____

E L W G

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PRODUCT ID	VOLTAGE	ANTENNA	LOCATION	GPS	CELLULAR NETWORK	GENERATION	OPTIONS
ELWG	0 = 120-277V	C = Standard 18	XX = Default	G = Default	M = Modem ATT	Blank = 3G	None = Default
						G = 4G	

Example

ELWG0CXXGMG: 4G Gateway 120-277V, Standard Antenna, GPS 4G Gateway with Modem configured for ATT , Network A

NODE SPECIFICATIONS

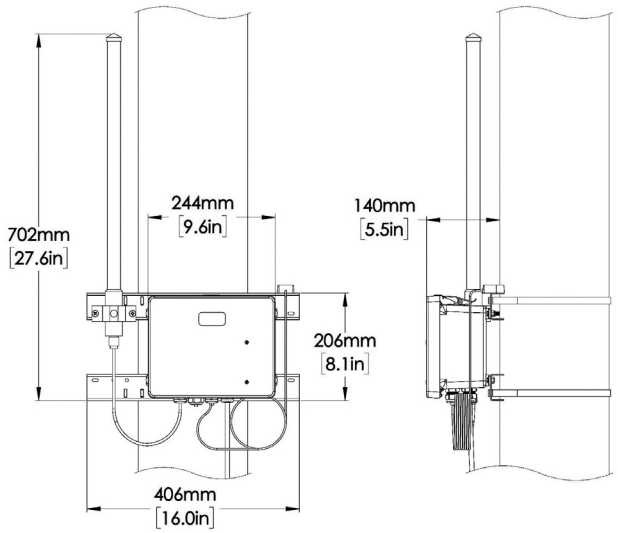
- Input Voltage: 120-277V
- Operating Temp: -40° to +50°C
- Surge Protection: 10kV/5kA Standard, per ANSI C136.2-2015
- Power Consumption: typical 4W
- GPS Accuracy: +/- 3m in clear open sky
- Addressing: IPv6 protocol
- Security: AES Encryption and Certificate Based Authentication

HOUSING & CONSTRUCTION

- Ingress Protection: Class IP65
- Weight: 7 lbs

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)



WARRANTY

☐ **5 Year (Standard)** ☐ **10 Year (Extended)**

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