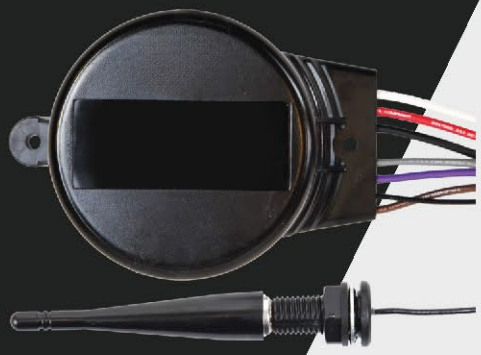
LIGHTGRID



DATE:	LOCATION:
TYPE:	PROJECT:

Notes:

ELWN Series

Internal Mesh Node

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

Designed for Post Tops and other luminaires where no external ANSI socket is available. Similar to the standard Lightgrid Mesh Node the internal node operates 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 up to 550 Nodes. Max Range 1000ft/330m.

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

PRODUCT FEATURES

Universal Voltage (120-277V) Standard
Enhanced Surge Protection 10kV/5kA per ANSI C136.2
Dimming interfaces 0-10V (analog) and DALI (digital)
Max Load 1000 W / 1500 VA
Auto Commisionning

LIGHTGRID

ELWN Series
Internal Mesh Node

DATE: LOCATION:

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Notes:

CATALOG LOGIC

ELWN										
Model	**Voltage**	**Configuration**	**Metering Type**	**Metering Precision**	**Antenna**	**Maximum Load**	**Network**	**Location Options**	**Dimming**	**Options**
ELWN	**0** 120-277V	**I** Internal Node	**X** Load + Node	**U** 0.5% Utility Grade	**X** SMA Connector	**X** 1000 W / 1500 VA	**A** Network A **B** Network B	**XX** North America	**AD** 0-10V / DALI	**2** Default

Example

ELWN0IXUXXBXXAD2: 120-277V, Internal Node, Utility Grade, Antenna with SMA Connector, GPS Commissioning Standard, Max Load 1000 W / 1500 VA, Network B, North America, 0-10V / DALI Interface

NODE SPECIFICATIONS

- Input Voltage: 120-277V
- Dimming 0-10V and DALI Dimming Supported per ANSI C136.41
- Operating Temp: -40° to +70°C Surrounding Air Temperature
- Surge Protection: 10kV/5kA Standard, per ANSI C136.2
- Typical Power Consumption: 1.5W @ 120V, 2W @ 277V
- Max Load Capacity: 1000 W / 1500 VA
- Inrush Current Limiting at Turn On
- Utility Grade Energy Measurement per ANSI C12.20 (0.5%)
- IR Output for Utility Meter Calibration Validation
- Ingress Protection: Class IP65
- Weight: 0.52 lbs / 0.24 kg

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 CAN ICES (A) / NMB (A)
- Security: AES Encryption and “End to End” Certificate Based Authentication

WARRANTY

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