LIGHTGRID

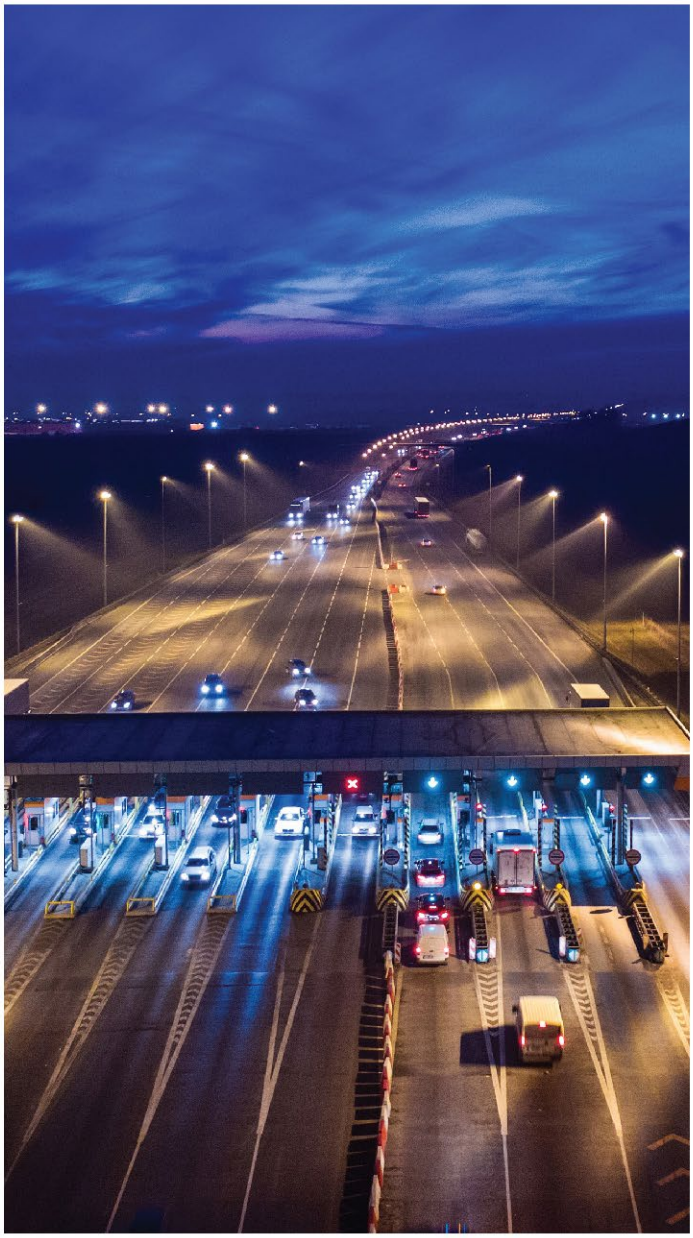
DATE:	LOCATION:
TYPE:	PROJECT:

Notes:

ELWN Series

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

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 CentralManagement 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. The Maximum range is 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 (120-480V) Standard
Enhanced Surge Protection 10kV/5kA per ANSI C136.2
0-10V (Analog) and DALI (Digital) Dimming Interfaces
Plug and Play Auto Commissioning
Connects through ANSI 7 Pin Connector
Integrated GPS and Tilt Sensor
Max Load 1000 W / 1500 VA

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CATALOG LOGIC

ELWN										
Model	**Voltage**	**Configuration**	**Metering Type**	**Metering Precision**	**Commissioning**	**Maximum Load**	**Network**	**Location Options**	**Dimming**	**Options**
ELWN	**1** 120-480V	**A** ANSI Socket (External Node)	**8** Load + Node	**U** 0.5% Utility Grade	**B** GPS	**A** 1000 W / 1500 VA	**A** Network A **B** Network B **C** Network C **D** Network D	**XX** North America	**AD** 0-10V/ DALI	**2** Default

Example

ELWN1A8UBAAXXAD2: 120-480V, ANSI Socket, Load + Node Metering, Utility Grade metering, GPS Commissioning, Max Load 1000 W / 1500 VA, Network A, Default Location, 0-10V / DALI Interface

NODE SPECIFICATIONS

- Input Voltage: 120-480V
- Dimming 0-10V and DALI Dimming Supported per ANSI C136.41
- Operating Temp: -40° to +50°C
- Surge Protection: 10kV/5kA Standard, per ANSI C136.2
- Typical Power Consumption: 1.5W @ 120V, 2W @ 277-347V, 2.4W @ 480V
- Photocell: Complies with ANSI C136.10-2006
- GPS Accuracy: +/- 3m in clear open sky
- 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 lb / 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)