LightGrid Wireless Control System

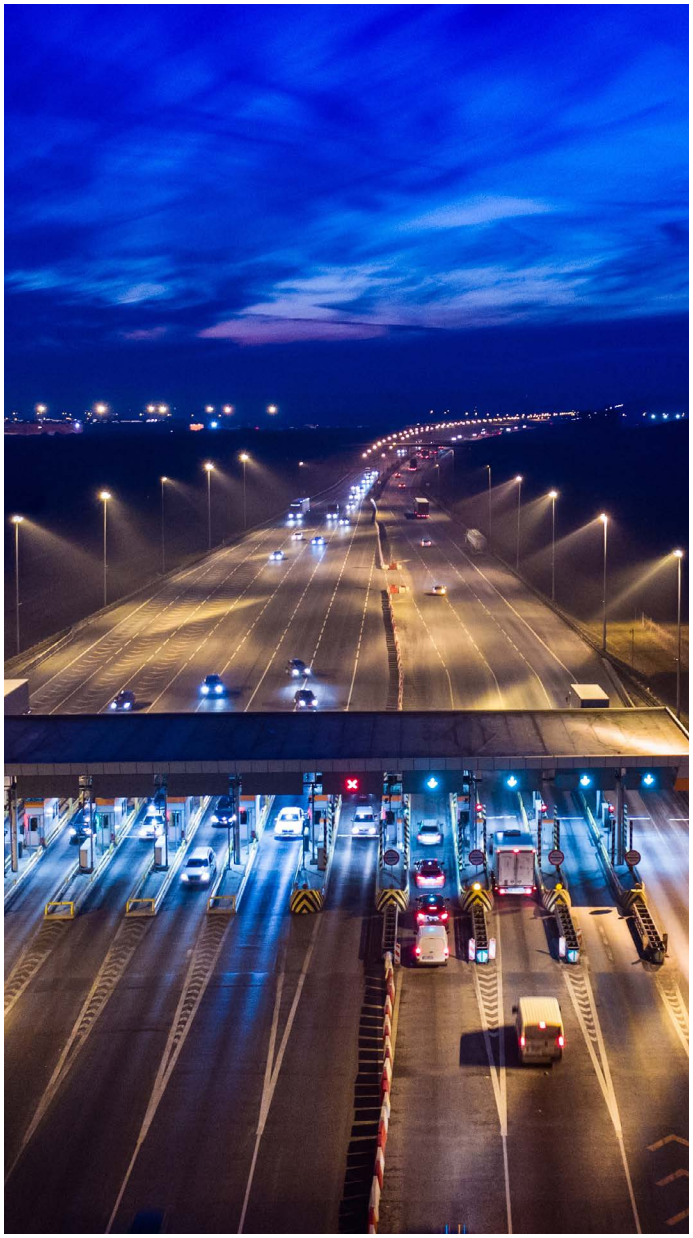
CAT-M Cellular Node (ELWC)

Project Name _____

Date _____ Type _____

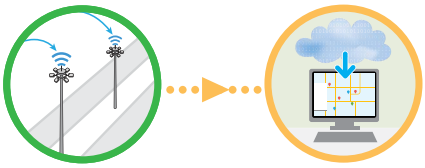
Notes _____

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, data travels directly from each node back to the server, without the need of a Gateway Modem.



WHY CELLULAR?

In linear deployments such as highways or parking lots with low numbers of light poles, the low node-to-gateway count makes mesh systems less cost effective. Cellular point to point is an excellent cost-effective alternate to mesh in these deployments.

- 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*

PRODUCT FEATURES

Universal Voltage (120-480V) Standard
Enhanced Surge Protection 10kV/5kA per ANSI C136.2-2015
0-10V (Analog) and DALI (Digital) Dimming Interfaces
Connects through ANSI 7-Pin
Integrated GPS and Tilt Sensor for Impacts > 3g
Max Load 1,000 Watts / 1,500VA

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LightGrid Wireless Control System

CAT-M Cellular Node (ELWC)

Catalog Logic and Spec Tables

Project Name _____

Date _____ Type _____

Notes _____

ORDERING NUMBER LOGIC

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ID	Voltage	Configurations	Metering Type	Metering Precision	Commissioning	Max Load	Network	Location Options	Dimming	Options
ELWC	**1** = 120-480V	**A** = ANSI Socket (External Node)	**8** = Load + Node	**U** = .5% Utility Grade	**B** = GPS	**X** = 1500 VA	**X** = LTE	**XX** = Default	**AD** = 0+10V/DALI	**None** = Default

Examples

ELWC1A8UBXXXXAD: 120-480V, ANSI Socket, Load and Node Metering, Utility Grade, GPS Commissioning, 1500W Load, LTE Network, DALI/0-10V Dimming

PRODUCT SPECIFICATIONS

NODE SPECIFICATIONS

- Input Voltage: 120-480V
- Both 0-10V and DALI Dimming Supported, per ANSI C136.41-2013
- Operating Temp: -40° to +50°C
- Surge Protection: 10kV/5kA Standard, per ANSI C136.2-2015
- 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: 1,000 Watt / 1,500VA Load
- Inrush Current Limiting at Turn On
- Utility Grade Energy Measurement per ANSI C12.20
- IR Output for Utility Meter Calibration Validation
- Ingress Protection: Class IP65
- Digital In/Out and Analog Inputs
- Configurable Serial In/Out Communication
- Weight: 0.52 lbs

NETWORK, COMPLIANCE & SECURITY

- Wireless networks: 4G Cellular (LTE) Cat-M1
- Band Compliance: CAT-M Bands 2, 4, and 12
- Carrier Certifications: AT&T, PTCRB
- Digital emissions: FCC part 15B (US), ICES-005 (Ca), Class A
- RF Certifications: Includes FCC ID: XMR201707BG96 / IC ID: 10224A-201707BG96
- Security: AES Encryption and "End to End" Certificate Based Authentication

WARRANTY

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

CTRL025 (Rev. 09/27/21)