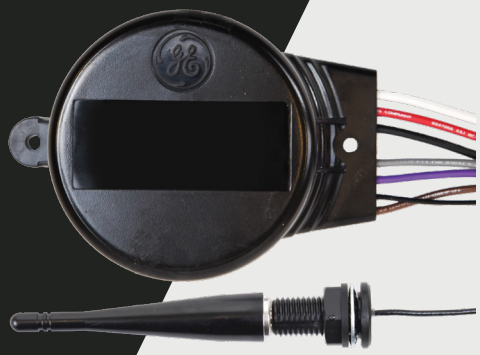
LightGrid™ Wireless Control System

Internal Mesh Node (ELWN)



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

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 hundreds of nodes.

- 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 (120-277V) Standard
Enhanced Surge Protection 6kV/3kA per ANSI C136.2-2018
0-10V (Analog)
Plug and Play
1000W Load @ >208V 840W Load @ 120V

GE current
a Daintree company

LightGrid™ Wireless Control System

Internal Mesh Node (ELWN)

Catalog Logic and Spec Tables

Project Name ______________________
Date ______________ Type ______________
Notes ______________________

ELWN
_ _ _ _   _   _   _   _   _   _   _   _ _   _ _   _ _ _ _

ID	VOLTAGE	CONFIGURATION	METERING TYPE	METERING PRECISION	ANTENNA	MAXIMUM LOAD	NETWORK	OPTIONS	DIMMING	OPTIONS
ELWN	0 = 120-277V	I = Internal Node	X = Load + Node	U = 0.5% Utility Grade	X = No Connector	X = 1000W	A = Network A	XX = North America	AD = 0-10V	None = Default
					S = SMA Connector		B = Network B			2 = 5.16.8 Firmware

Examples

ELWN0IXUXXXXXAD: 120-277V, Internal Node, Load and Node Metering, Utility Grade, Direct Connected Antenna, 1000W Load, Network A, 0-10V Dimming
ELWN0IXUSXBXXAD2: 120-277V, Internal Node, Load and Node Metering, Utility Grade, SMA Connector for Antenna, 1000W Load, Network A, 0-10V Dimming, 5.16.8 Firmware Update.

NODE SPECIFICATIONS

Input Voltage: 120-277V
0-10V
Operating Temp: -40° to +70°C
Surge Protection: 6kV/3kA Standard, per ANSI C136.2-2015
Typical Power Consumption: 1.5W @ 120V, 2W @ 277V
Max Load Capacity: 1,000 Watt / 1,500VA Load
Inrush Current Limiting at Turn On
Utility Grade Energy Measurement per ANSI C12.20
Ingress Protection: Class IP65
Weight: 0.52 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)
Security: AES Encryption and “End to End” Certificate Based Authentication

WARRANTY

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

CTRL018 (Rev 04/13/21)