



LORA NEMA LAMP CONTROLLER

MODEL: LCU16LD





■ Features



- **Standard NEMA 7-PIN Interface**
Plug-and-play, easy for installation
- **Built-in RTC**
Supports scheduled control strategies
- **Optional Tilt Detection**
Detects lamp post tilt and triggers an alarm
- **Optional GPS Functionality**
Automatic GIS location tracking
- **Industrial-Grade Design**
Ensures stable operation in harsh environments, with an operating range of -40°C to 85°C.
- **Waterproof Rating**
IP66, IK08
- **Dual Band Communication**
Sub-1G wireless communication
- **Automatic Network Enrollment**
supports long-distance communication
- **AC Metering Function**
Measures AC voltage, current, active power, power factor, active energy consumption.
- **Lighting Duration Statics**
Enables assessment of luminaire lifespan.
- **Dimming Modes**
Supports DALI or 0-10V analog output, adapting to LED driver dimming modes
- **Luminaire Fault Detection**
Configurable alarm parameters with proactive fault reporting

■ Cautions

- **The warranty is void if the controller casing is opened by unauthorized personnel.**
- **Installation must be conducted by qualified and professional personnel to ensure compliance.**
Make sure to properly insulate all wiring terminals to prevent any electrical hazards.
Rotate the interface connectors carefully during installation to ensure complete and secure contact.
Follow the interface specifications closely to avoid any incorrect connections.
- **Do not install in environments with prolonged high temperatures to avoid reducing product lifespan.**

Basic Information

Electrical Circuit	Single circuit, 250V/16A contact capacity			
AC Input/Output Parameters	Input Voltage Range	96V-264VAC	Input Frequency Range	50-60Hz
	Current Range	0-2A	Standby Power Consumption	< 2W
	Maximum Load Power	≤ 400W	Surge Protection	4KV

Dimming Mode

Dimming Mode	Analog Voltage	DALI
Output Parameters	0-10V	DALI 1.0, DALI 2.0
Remarks	Adaptive LED driver dimming type	

Metering and Accuracy

Voltage Range	100-264VAC	Current Range	0-2A
Measured parameters	AC Input Current, AC Input Voltage, Power Factor, Active Power, Active Energy		
Fault monitoring	Overcurrent, Overvoltage, Undervoltage, Luminaire Fault, Low Power Factor		
Metering Accuracy	3%		

Communications

Model	LCU16LD-A		LCU16LD-E	
Frequency Standard	923M		868M	
Frequency for Transmission	910.7M-1010.7M(500K interval)		820.7M-895.7M(500K interval)	
Frequency for Reception	910.2M-1010.2M(500K interval)		820.2M-895.2M(500K interval)	
Standard	IEEE 802.15.4g	Transmission Sensitivity	20dBm	
Antenna Gain	1.5dBm	Receiver Sensitivity	-137dBm	

Operating Conditions

Operating Temperature	-40°C ~ +85°C	Storage Temperature	-55°C ~ +125°C
IP Rating	IP66	Relative Humidity	< 95%
Weight	0.24KG	Dimensions	∅ 84 mm, H 98 mm

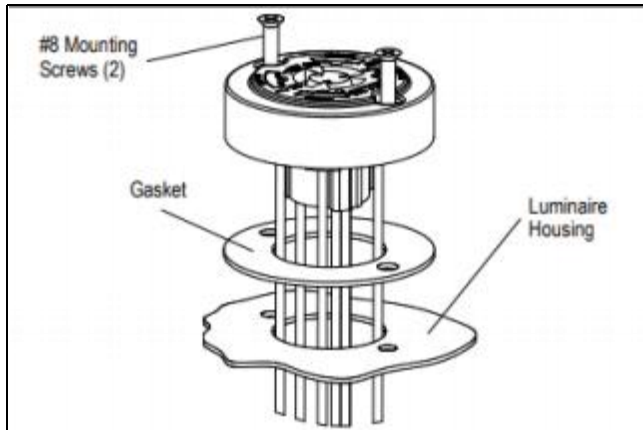
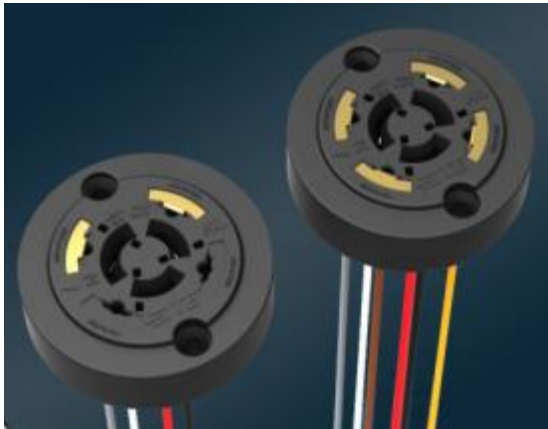
Conformity

CE-EMC	EN IEC 55015:2019+A11:2020 EN 61547:2023, EN IEC 61000-3-2:2019+A1:2021 EN 61000-3-3:2013+A1:2019+A2:2021	RED	ETSI EN 300 220-1 V3.1.1(2017-02) ETSI EN 300 220-2 V3.1.1 (2018-06)
CE-LVD	EN 61347-1:2015+A1:2021 EN 61347-2-11:2001+A1:2019 EN 62493:2015+A1:2022	RoHS	In accordance with the RoHS Directive 2011/65/EU and its amendment (EU) No. 2015/863.
Connector	ANSI C136.41		

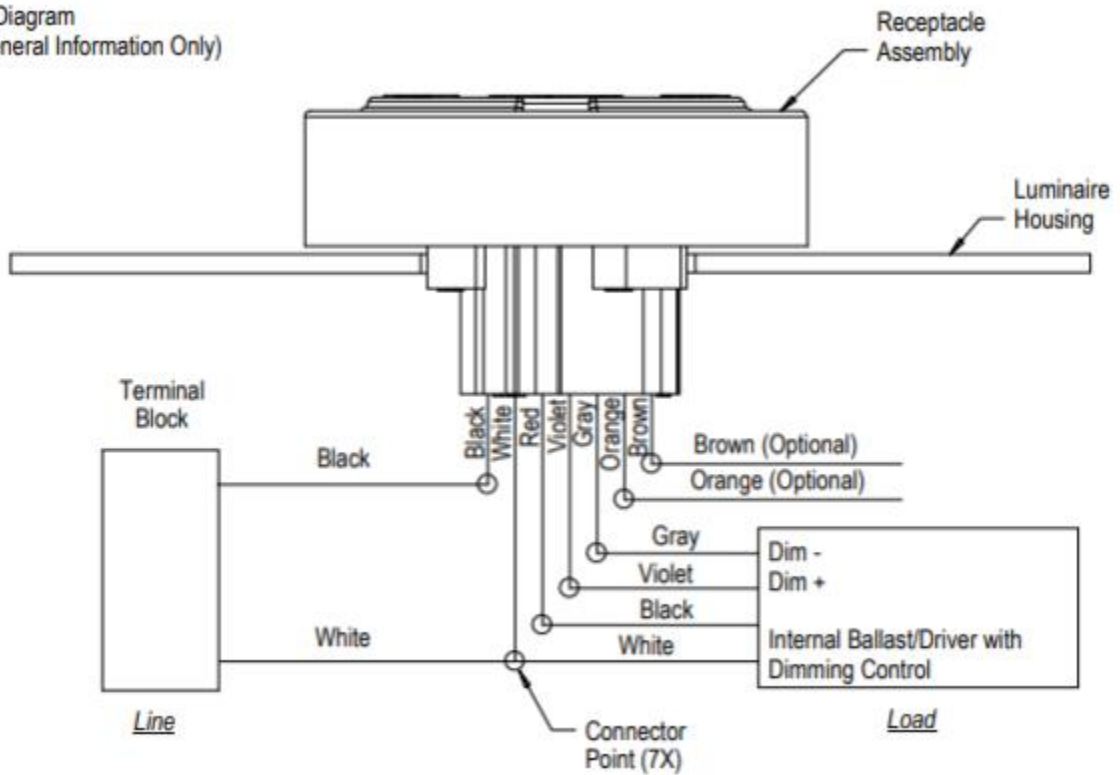
Customizations

Tilt Detection	Customizable, preset 30° alarm threshold
GNSS	Customizable, support GPS / Beidou

■ Wiring



Wiring Diagram
(For General Information Only)



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