

APPLICATIONS

- Smart street lights
- Remote device control

PRODUCT HIGHLIGHTS

- Designed for large municipality street light deployments
- Unique addressable ID for every luminaire
- Autonomous operation with multiple calendar schedules
- Up to 30% energy saving with PWM luminaire brightness control.
- Built-in RTC clock for operation during Network faults
- Minimal LoRaWAN communication for lower cost of operation

GENERAL DESCRIPTION

LUCI is an advanced LoRaWAN street light control system designed to be deployed in large municipal street light installations and helps save up to 30% energy in street light operations.

LUCI devices offer brightness control work with any PWM(0-10v) based LED drivers for 20-400Watts luminaires. For convectional lights, LUCI offers individual on/off functionality.

Each luminaire fitted with a LUCU device is assigned a unique addressable ID on the network and can is used to monitor, operate and configure it. The LUCI constantly monitors and operates the Luminaire and reports any anomalies to the LoRaWAN network.

LUCI is a highly configurable device with over 30 configuration commands to tweak the operation to maximum efficiency. Please request for the protocol documentation for a complete list of configuration options available with various versions of LUCI.

Easy mounting and setup and compatibility with a variety of PWM drivers make LCU devices an ideal fit for most LED streetlight projects as well as conventional systems.

LUCI is fully compatible with our LiteCloud web application that allows easy management of street lights including commissioning, installation, monitoring and part replacement.

FEATURES

- **On/Off** – Ability of turn on / off a luminaire
- **Dimming** – Ability to adjust brightness of a luminaire using 0-10v PWM with 0.1v resolution.
- **Schedule mode** – Ability to control on/off/brightness of luminaire according to pre-set schedules.
- **Manual mode** - Ability to manually override schedules and control luminaire on/off/ brightness.
- **Built-in RTC** – Built-in clock to maintain luminaire schedule even if network is unavailable.

LUCI PRODUCT RANGE

LUCI comes with multiple telemetry and connector options

LUCI Products	Telemetry	Connector
LUCI-LoRaWAN	LoRaWAN 1.0 – class C	3-core-cable-in / 5-core-cable-out
LUCI-NEMA7-LoRaWAN	LoRaWAN 1.0 – class C	NEMA7 - ANSI C136.41
LUCI-LoRa	LiteCloud LoRa Protocol	3-core-cable-in / 5-core-cable-out
LUCI-NEMA7-LoRa	LiteCloud LoRa Protocol	NEMA7 - ANSI C136.41

DATASHEET

LUCI – Light Universal Control Instrument

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SPECIFICATIONS

LORAWAN	
Available frequencies	IN865-7, EU868, AU914, (Others can be made-to-order)
Wireless Standards	LoRaWAN 1.0 Class C, LiteCloud-LoRa
Maximum Transmit Power	14/18/21 dBm
Typical Receive Sensitivity	-125 dBm @ SF 8
PWM DIM OUTPUT	
PWM /Analogue	PWM 0-10v, Analog 0-10 [isolated]
OPERARATIONAL SPECS	
Operating/Storage Temperature	-25C to 70C
Enclosure protection level	IP65, outdoor weatherproof
Input power supply	220v
PHYSICAL DIMENSIONS	
LUCI-NEMA7 (LoRa and LoRaWAN)	
Width x Height	90mm x 110mm
LUCI-LoRa	
Width x Height x Depth	132mm x 70mm x 50mm

MODELS

	OF	OFD	OFDC	OFC
On/Off	Yes	Yes	Yes	Yes
Dimming	-	Yes	Yes	-
Current sensor	-	-	Yes	Yes
Grid electricity detection	-	-	Yes	Yes
Schedule mode	Yes	Yes	Yes	Yes
Manual mode	Yes	Yes	Yes	Yes
Built-in RTC	Yes	Yes	Yes	Yes

PRODUCT PHOTOS

LUCI-LoRaWAN , LUCI-LoRa (OF/OFD/OFDC/OFC)	LUCI-NEMA7-LoRaWAN, LUCI-NEMA7-LoRa
	

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WIRING DIAGRAM

LUCI-LoRaWAN, LUCI-LoRa

Wiring diagram for LUCI-OFD and LUCI-OFDC



Wiring diagram – OFD, OFDC, OFDA

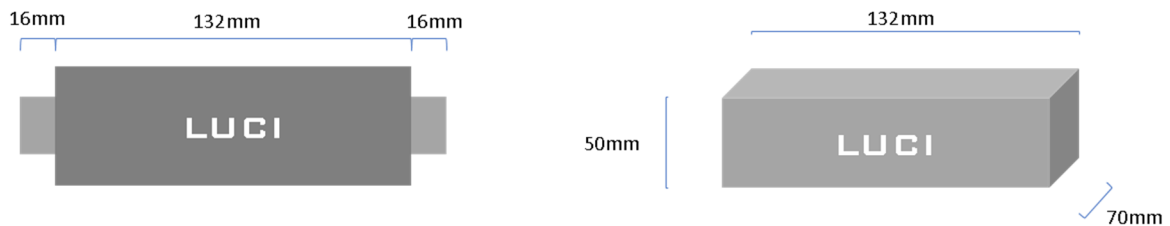
Wiring diagram for LUCI-OF and LUCI-OFC



Wiring diagram – OF, OFC, OFA

DIMENSIONS

LUCI-LoRaWAN, LUCI-LoRa



LUCI-NEMA7-LoRaWAN, LUCI-NEMA7-LoRa

