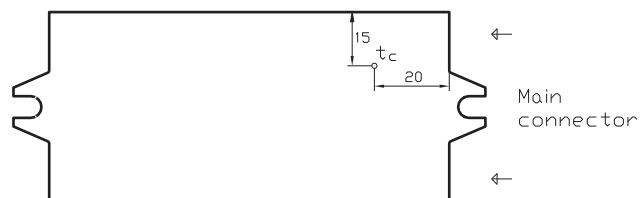# Luminaire Controller
LC2M2305R

Description

Citintelly Luminaire Controller implements Smart Street Lighting control functions using wireless 868 MHz radio communication with mesh-networking protocol. The Citintelly Luminaire Controller has 2 relay outputs and combined DALI/1..10 V control interfaces, as well as two digital inputs and external sensor supply 5 V.

The Citintelly Central Management Software (CMS) allows remote control and monitoring of Luminaire Controllers, storing historical data and analyzing it. The Citintelly Segment Controller is used as gateway between CMS and Luminaire Controllers.
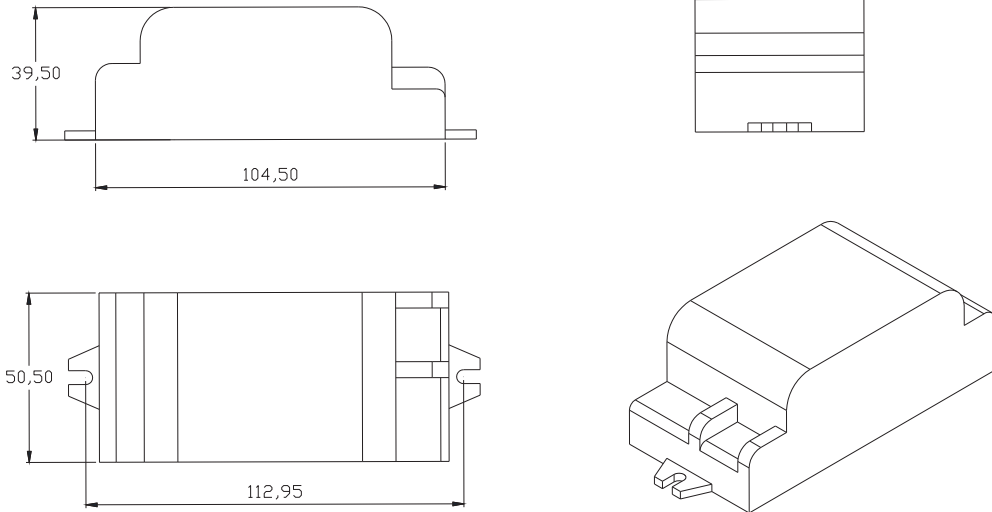
Technical data

Luminaire controller has IP20 enclosure for protection against accidental contact with live parts.

Description field	Qty	Details
Power supply		AC 50-60 Hz
Supply voltage		220-240 V (Vmin 170 V; Vmax 265 V)
Temperature range		ta: -40 °C ... +75 °C
Maximal case temperature		tc: 95°C (see drawing below)
Relay output	2	1 kVA (NO or NC) each relay output
Type of load		LED luminaire, LED/HID luminaire ballast, decorative lighting, incandescent bulb
Electrical meter		Yes (U, I, f, cosF, P, Q, S)
LED driver control interface (software selected)		DALI (18 V supply) / 1-10 V
Digital inputs	2	5 V tolerant
Supply voltage for external sensors		5 V (50 mA)
RF network connection	1	868 MHz, IEEE 802.15.4 standard
Transceiver Class		2 (non-licensed band with external antenna socket)
Dimensions		LxWxH: 105x50x40 mm
Weight		160 g
Case material		PA66 flame-retardant (UL94 V0)
Conductor cross-section		MAIN: 0.25-2.5 mm2, strip length 10-11 mm EXT: 0.2-1.5 mm2, strip length 8-9 mm

Drawings

39,50

104,50

50,50

112,95

Certificate conformity

Safety

05 According to EN 61347-2-11 and
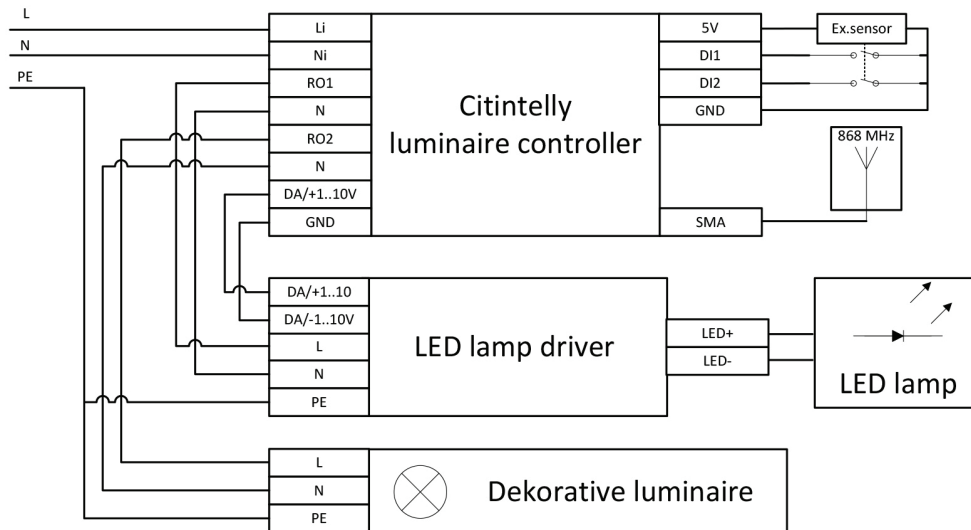EN 61347-1 – Lamp control gear

RF and EMC matters

• ETSI EN 300-220-2 - Electromagnetic compatibility and Radio spectrum Matters (ERM);
• EN 301 489 - 1 (1.9.2) & 7 (1.3.1) - Electromagnetic compatibility and Radio spectrum Matters
• EN 55015:2013 - Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment
• EN 61547:2009 - Equipment for general lighting purposes - EMC immunity requirements

Chemical

RoHS Restriction of Hazardous Substances

Luminaire Controller LC2M2305R

Citintelly
LIGHT FOR THE SMART CITY

Connection diagram

Citintelly luminaire controller		
Li	5V	Ex.sensor
Ni	DI1	
RO1	DI2	
N	GND	
RO2		868 MHz
N		
DA/+1..10V		
GND	SMA	

LED lamp driver		**LED lamp**
DA/+1..10	LED+	
DA/-1..10V	LED-	
L		
N		
PE		

Dekorative luminaire
L
N
PE

Features

- 868MHz based communication featuring self-healing/multi-hoping mesh-type networking protocol with AES128 bit encryption
- Combined DALI/1-10V control output
- External sensor supply 5 V and over DALI line (up to 10 mA)
- 2 relay outputs (NO/NC) and 2 digital inputs
- Energy meter on AC side (U, I, f, cosF, P, Q, S) and data from LED driver (ILED, ULED, P, temperature, minutes of operation)
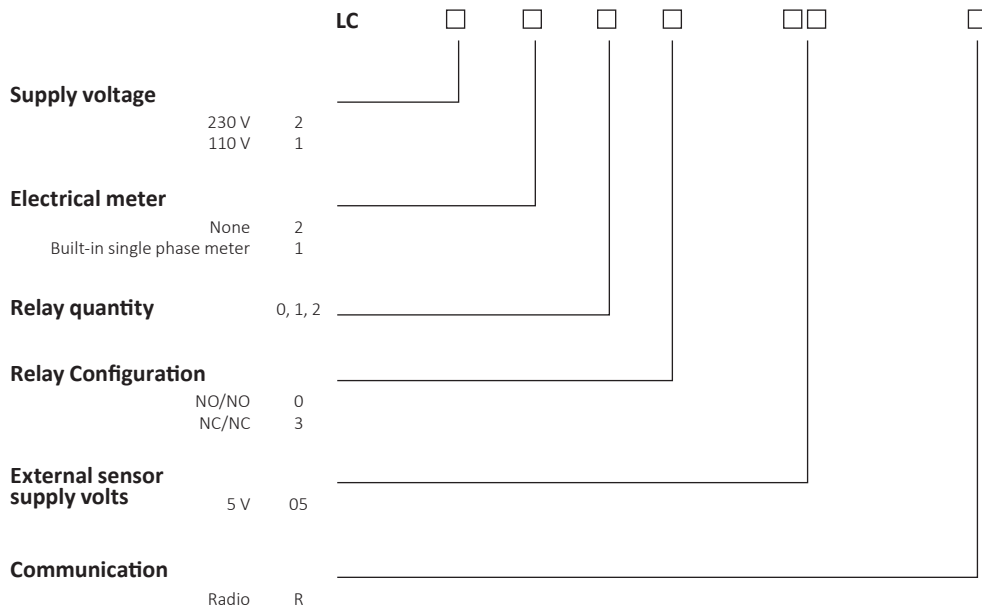- Firmware update over the air via CMS application

Smart city features

Citintelly products provide full functionality for the smart city. Outdoor lighting is important resource that needs to be managed efficiently. Light should be provided as much as necessary for safety and as little as possible for energy saving. Public lighting has to be in the right place and only there for the citizen wellbeing to avoid light pollution. Citintelly luminaire controllers are equipped with two digital inputs to connect various sensors to enable full lighting control for the city.

The Central Management Software allows to implement electrical energy demand-side management depending the price of electrical energy or budget restrictions.

Citintelly
LIGHT FOR THE SMART CITY

Ordering codes   LC 2 M 2 3 05 R

LC ☐ ☐ ☐ ☐ ☐☐ ☐

Supply voltage

230 V	2
110 V	1

Electrical meter

None	2
Built-in single phase meter	1

Relay quantity   0, 1, 2

Relay Configuration

NO/NO	0
NC/NC	3

External sensor supply volts   5 V   05

Communication   Radio   R