



# Detay LCU01DTY

Lamp Controller



| General Specifications        |                                                                                          |  |
|-------------------------------|------------------------------------------------------------------------------------------|--|
| Product Code                  | LCU01DTY                                                                                 |  |
| AC Metering Function          | Measures AC voltage, current, active power, power factor, active energy consumption      |  |
| Lighting Duration Statistics  | 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                             |  |
| 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             | IP65, IK08                                                                               |  |
| Electrical Specifications     |                                                                                          |  |
| Electrical Circuit            | Single circuit, 250V/16A contact capacity                                                |  |
| AC 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

|                            |                                                                                       |
|----------------------------|---------------------------------------------------------------------------------------|
| Standard                   | IEEE 802.15                                                                           |
| Frequency for Transmission | LCU01DTY-A: 910.7M-1010.7M (500K interval); LCU01DTY-E: 820.7M-895.7M (500K interval) |
| Frequency for Reception    | LCU01DTY-A: 910.2M-1010.2M (500K interval); LCU01DTY-E: 820.2M-895.2M (500K interval) |
| Transmission Sensitivity   | 20 dBm                                                                                |
| Receiver Sensitivity       | -137 dBm                                                                              |
| Antenna Gain               | 1.5 dBm                                                                               |

Operating Conditions

|                     |                  |
|---------------------|------------------|
| Working Temperature | -40°C to +85°C   |
| Storage Temperature | -55°C to +125°C  |
| Relative Humidity   | < 95%            |
| Weight              | 0.24KG           |
| Dimensions          | Ø 84 mm, H 98 mm |

Conformity

|           |                                                                                      |
|-----------|--------------------------------------------------------------------------------------|
| CE-EMC    | EN IEC 55015:2019+A11:2020, EN 61547:2009                                            |
| CE-LVD    | IEC 61347-1:2015+A1:2017, IEC 61347-2-11:2001+A1:2017                                |
| RoHS      | In accordance with the RoHS Directive 2011/65/EU and its amendment (EU) No. 2015/863 |
| Connector | ANSI C136.41                                                                         |

Customization

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

Wiring Diagram

