SL31 compact smart controller for street-lighting installation in the junction box

SL31 controllers can control DALI or electronic ballasts (1-10V) or magnetic in ON/OFF or dimming, in a compact case installed directly into the junction box of the pole or in the luminary (depending on versions). Based on LonWorks® protocol, open and interoperable (open language), they can operate in autonomous or driven mode or integrated into a remote management system.

Operating principle

Thanks to its small size, SL31 can be placed directly into the junction box. It allows to:

- **drive and control** any type of electronic (DALI, 1-10V) or magnetic ballast (ON/OFF or dimming)
- **control ignition, extinction and dimming** of an outdoor lighting (to adjust light levels as needed, depending on time schedule)
- get the operating status of each lamp / ballast and sends **alarm** in case of failure (see technical datasheet)
- control each lighting point or a group of lighting points in real time and follow consumption when integrated in a remote management system.
- **manage** the power of an additional element (festive lighting, video surveillance ...) or **switch off the ballast** during the day (for permanently powered network) thanks to its relay (mandatory use for 1-10V).

In option, it allows measurement of instantaneous parameters (voltage, current, power factor), recording of accumulations (power) and alarm feedback for 1-10V versions.
**Mechanical Specifications**

- Material: ABS V0 / PC V0
- Dimensions: L.91.6 x l.36 x h.65mm
- Weight: 190 gr
- Mechanical protection: IP2X

**Electrical Specifications**

- Powering: 195 to 265VAC (FD version) 88 to 265 VAC (others versions) / 50 to 60Hz
- Output current: 3A Max
- Measures: Information feedback of the lamp + ballast status (DALI version)
- Ignition hours (all versions)
- Alternative measures: Current consumption, Voltage, Power factor
- Lamp and ballast status (other than DALI version)

**CPL Specifications**

- Communication: CPL - C band
- CENELEC EN50065-1 (4800 bauds)
- Propagation: Ability to repeat the signal from pole to pole
- Power loss of signal
- Connection: Possibility to connect via internet at the segment controller (i.Lon Echelon)
- Réseau Lon®: ISO/IEC 14908
- LON® node based on LonTalk® Protocol

**Wiring and Installation**

- Connectors: 7 pts removable (5.08mm max)
- 4 pts removable (5.08 mm max)
- Cables section: 0.2 to 3 mm² single-stranded , 2.5 mm² multistrand
- Installation: On DIN rail into the Class 2 junction box or in luminary (see versions)

**Environment**

- Storage Temperature: -25°C to +75°C
- Use Temperature: -25°C to +60°C (+45°C for FD)
- Humidity: 95%

**Norms / Warranty**

- DIRECTIVE 2006/95/CE « LOW TENSION »
- DIRECTIVE 2004/108/CE « ELECTROMAGNETIC COMPATIBILITY »
- DIRECTIVE 2002/95/CE « ROHS DIRECTIVE »

All our products are warranted 5 years by standard exchange (see General Terms of Sales)

**Range**

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<th>Description</th>
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| SL31-EDA4 | 1 power output (600W -3A)  
2 outputs for control up to 4 DALI ballasts  
1 NO/NC auxiliary relay |
| SL31-EDA-ECS | 1 power output (600W -3A)  
1 output for control up to 2 DALI ballasts  
1 NO/NC relay  
1 dry entry contact |
| SL31-ED-ECS | 1 power output (600W-3A)  
1 output for dimming 1-10V  
1 NO / NC relay  
1 dry entry contact |
| SL31-1T | 1 power output (600W -3A)  
1 NO/NC relay |
| SL31-FD-M | 1 power output (250W -3A) + measure included - no relay  
1 connection control for control of magnetic ballast |
| Measure Option | Measurement of U, I, Power factor, T° |