

Smart controllers range for street-lighting - to be fixed into the pole

Street-lighting controllers designed by Citylone can be integrated into a management solution. They allow to control each individual streetlight, in a real time and from any workstation; to track the energy consumption in a zone; to reduce maintenance efforts with failures and alarms detection while improving quality of street-lighting...



The SL42-xx street-lighting controllers (LON[®] node) communicate via the powerline technology on the LonWorks[®] network (use of the existing electrical network).

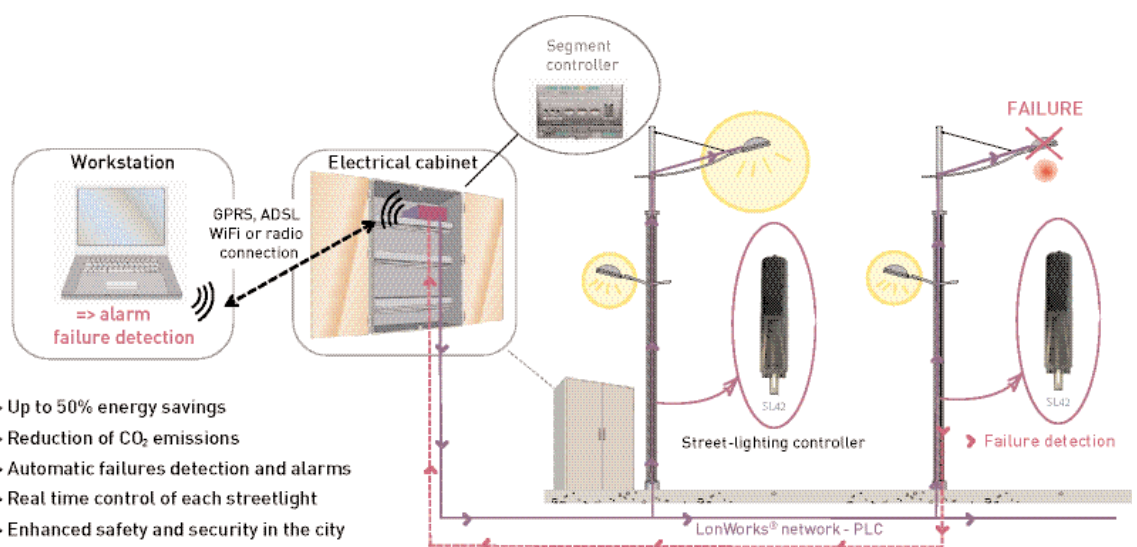
Fixed into the pole, upstream from the ballast, it controls magnetic ballasts as well as electronic ballasts (ON/OFF or dimming), for sodium or metal iodide lamps (power from 70W to 250W for magnetic ballasts and up to 500W for electronic ballasts).

The SL42-xx controllers also allow to control external services, via the existing electrical network (without any additional wiring): bus stop panel, phone box, video surveillance, festive lighting...

Functional specifications

The SL42-xx street-lighting controller:

- controls each individual streetlight: ON/OFF or light dimming (adjustment of the lighting level to reduce the energy consumption while ensuring optimum safety and security in the different areas of the city).
- collects each lamp status and sends the information to the segment controller: easier scheduling and more efficient maintenance.



- > Up to 50% energy savings
- > Reduction of CO₂ emissions
- > Automatic failures detection and alarms
- > Real time control of each streetlight
- > Enhanced safety and security in the city

- is dedicated to existing urban installations: magnetic ballast command ON/OFF or dimming (patented system) allowing to reduce the power.
- is dedicated to new urban installations: electronic ballast command ON/OFF, 1-10Vdc or DALI.

Electrical specifications

Power supply: 230 VAC +/- 10% - 50 Hz

Available versions:

- 1 dimming controlled output for electronic ballast 1-10Vdc or DALI (230V / 3A)
- 1 dimming controlled output for magnetic ballast (250W max) (patented system)
- 1 ON/OFF controlled output for magnetic or electronic ballast (230V / 3A).

All street lighting controllers are equipped with an **ON/OFF independent auxiliary output** (3A max) to control additional services.

Communication: Power line communication (PL3120) CENELEC EN50065-1 (4800 baud)

LON® network: ISO-IEC 14908, LON® node based on the LonTalk protocol

Mechanical specifications

Material: module in ABS V0 / PMMA charcoal grey

Dimensions: L.337,2 x l.75 x H.48,4 mm

Connectors: unpluggable connector 9 pins (pitch 5,08 mm) - cable 0,2 to 3 mm² section

Environment

Operating: -25°C to +60°C

Standards: CE marking - controllers respect european directives and products standards (2006/95/CE directive)

Lighting controller connections and power supplies are also french standards respectful (NF C17-200 & NF C15-100).

Installation

- The controller can be fixed by screwing (1 or 2 screws - not provided), or with its support for an adjustable position (provided)
- It has to be positioned above the protection box
- To test the electrical installation pole per pole: infrared sensor integrated for test by remote controller (please contact us for more details)
- For a magnetic ballast, the capacitor can be placed inside the controller.

Identification

Reference	Name
SL42-ED-1T	Street lighting controller for 1-10Vdc electronic ballast + 1 ON/OFF independent auxiliary output
SL42-EDA-1T*	Street lighting controller for DALI electronic ballast + 1 ON/OFF independent auxiliary output
SL42-FD-1T**	Street lighting controller for magnetic ballast + 1 ON/OFF independent auxiliary output
SL42-2T	Street lighting controller for magnetic <u>or</u> electronic ballast + 1 ON/OFF independent auxiliary output

* The ballast has to be addressed (default address "1" or "2").

One street-lighting controller can drive 2 DALI ballasts.

** Version for magnetic ballast: the capacitor has to be placed inside the controller.

Note: for a power measure option on the auxiliary output (SL42-ED-1T, SL42-EDA-1T, SL42-2T), please contact us.