CITIGIS SYSTEM

LEVEL 1 – LIGHTPOINT

POWERLINE CONTROL FROM STREETLIGHTING CABINETS

URLYS PLC

Main features

URLYS-PLC is a bidirectional point-to-point control system.

Each point is controlled individually. It is required to install small terminals (nodes) URLYS PLC, which transmit the information from the ballast-driver and lamp to the cabinet via powerline communication – no control wires needed.

In the cabinet, there must be installed another terminal (segment controller) DAT-LUX-PLC.
This terminal retrieves and stores information from lightpoints and is transmitted to Citigis software.

From the Control Center it is possible to monitor and command lightpoints at real time. Commands such as switching ON-OFF, dimming orders DALI, 1-10V, relay, status **are supported for more that 40 luminaire and lamp manufacturers**.

Installation of URLYS PLC nodes
They can be installed in the luminaire or in the column.

Installation of DAT-LUX PLC segment controller
It is installed in the streetlighting cabinet.
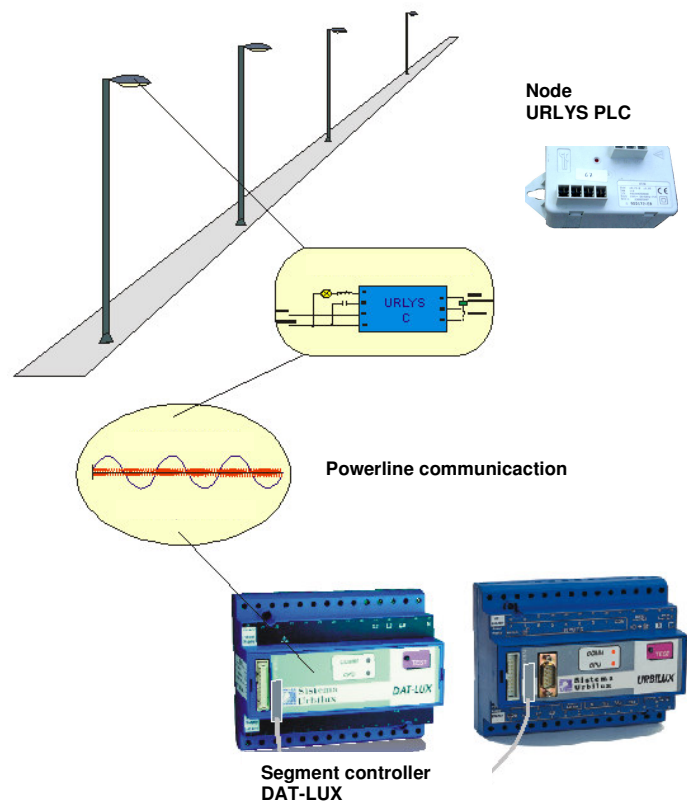
All equipment include universal barcodes and labels.

Set up of a project
Each project must be planned accurately, and all equipment must be strictly labelled in order to ease setup process.

Integration with CITIGIS platform
CITIGIS software manages nodes of more than 40 manufacturers.
All information from manufacturers is homologated so maintenance staff is able to cope with different type of installations on the same platform.

Node
URLYS PLC

Powerline communicaction

Segment controller
DAT-LUX

URLYS PLC and DAT-LUX PLC are manufactured according to norms :
EN 50081-1-92
EN 50082-1-92
EN 50082-2-95
EN 61010-1

ISO9001Quality assurance
CE Mark

TECHNICAL SPECIFICATIONS

NODE URLYS PLC

Installed on each lightpoint

Main features:
- Lamp failure detection
- Lamp flickering detection
- Saving system
  DALI, 1-10V, output relay
- Voltage presence detection
- Current measurement
- Capacitor status checking
- Working hours meter
- Digital input (e.g. door access at the lightpoint)

Technical specifications URLYS PLC
Lamp measurement circuit
Minimum intensity detection 300mA
Nominal intensity: 2A
Maximum RMS intensity: 5A
Maximum intensity: 20A 2.5 sec
Accuracy: +/- 0.05 A
Capacitor measurement circuit
Maximum intensity: 20A 2.5 sec
Outputs
  DALI master (IEC60929) (1 or 2 DALI ballasts)
  1-10V
  Digital output NPN, with protection diode
Digital input PNP voltage-free
Working hour meter: 0 - 16384 hours
Signal transmission
Output power: 116 dBmV.
Category: Class 116 (EN50065)
Carrier: FSK120kHz, BW 6kHz.
Power supply: 184 - 255 VAC.
Frequency: 45 - 65 Hz
Consumption: 9 VA
Temperature range: -10ºC - 80ºC
Humidity renge: 5% a 90%
Policarbonate V0 envelope box: IP55
Dimensions: 162,5 x 75 x 68 mm

SEGMENT CONTROLLER DAT-LUX PLC

Installed on the cabinet

It centralises the command and the status off all lightpoints. Information retrieved is sent to the Contol Center.

Lightpoints can be managed with individual / group / general commands.

These funcions are configurable and reprogrammable :
- Charging curves
- Dimming steps
- Alarms
- Schedules and timetables for actuators

Technical specifications DAT-LUX PLC
Number of nodes
Up to 255 nodes URLYS PLC

Signal communicacion
Otput power: 116 dBmV
Category: Class 116 (EN50065)
Carrier: FSK120kHz, BW 6kHz
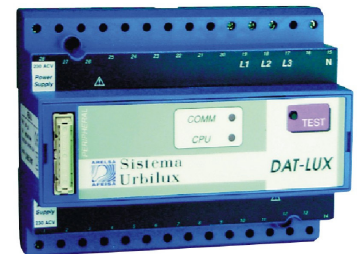**Power supply:** 184 - 255 VAC
Frequency: 45 a 65 Hz
Consumption: 30 VA.
Temperature range: -10ºC - 80ºC
Humidity range: 5% - 90%
Box: Class II DIN 43880 rail
Dimensions: 140 x 110 x 70 mm

Filters

Powerline communicaction must not affect to other equipment, so it must be filtered to the electrical network.
Bandpass filters must be installed in the cabinet to avoid such interferences.

Software CITIGIS

Used in two steps.
- Configuring and commissioning the project
- Telemanagment exploitation for maintenance and energy control on regular basis