Components used on the Mulitlamp system

SLaV Software application to remote monitor and control the installations

It is a web based software application that provides the status of the lamps in real time, informing about the failure alarm of every independent lamp and reporting its status through e-mail or SMS messages to the maintenance center. It includes different schedulers to manage the installation and the possibility to create groups of luminaires over which switching ON/OFF/DIMMING functions can be programmed.

SLaC Internet Controller for the control cabinet

It is a DIN rail device installed on the control cabinet that provides communication between the installation and the control center through internet. It can use a GPRS modem or an Ethernet connection for the communication to the building. The transmission up to the luminaires is done through the existing mains wire on the installation (powerline communication) and includes an astronomic clock to do the switching on and off when sun shines or rises. The device includes a mechanism to retransmit the messages over the powerline network improving the communication and doing it robust and reliable.

SLaM Luminaire Controllers, different models depending on the application

These are the devices that will be installed on every luminaire and provide the remote control of the installation. Include functions to switch ON, OFF and control the dimming of the luminous flux, and also alarm failure of the lamp. It communicates up to the cabinet through the existing mains wire.

When no remote control is needed to the maintenance company, it can be also possible to control the installation using a small device installed on the cabinet that provides functions to switch ON, OFF and control the dimming of groups of lamps with the lowest possible cost for the customer.

Integration with other systems

It can also be possible to integrate the Multilamp system with other subsystems from third parties to provide the point to point lighting control solution to any manufacturer focused only on the cabinet control, and expand their solutions to the entire lamp point control.

e-controls

MULTILAMP

MULTILAMP

**Energy efficiency
and remote control**
of streetlighting installations
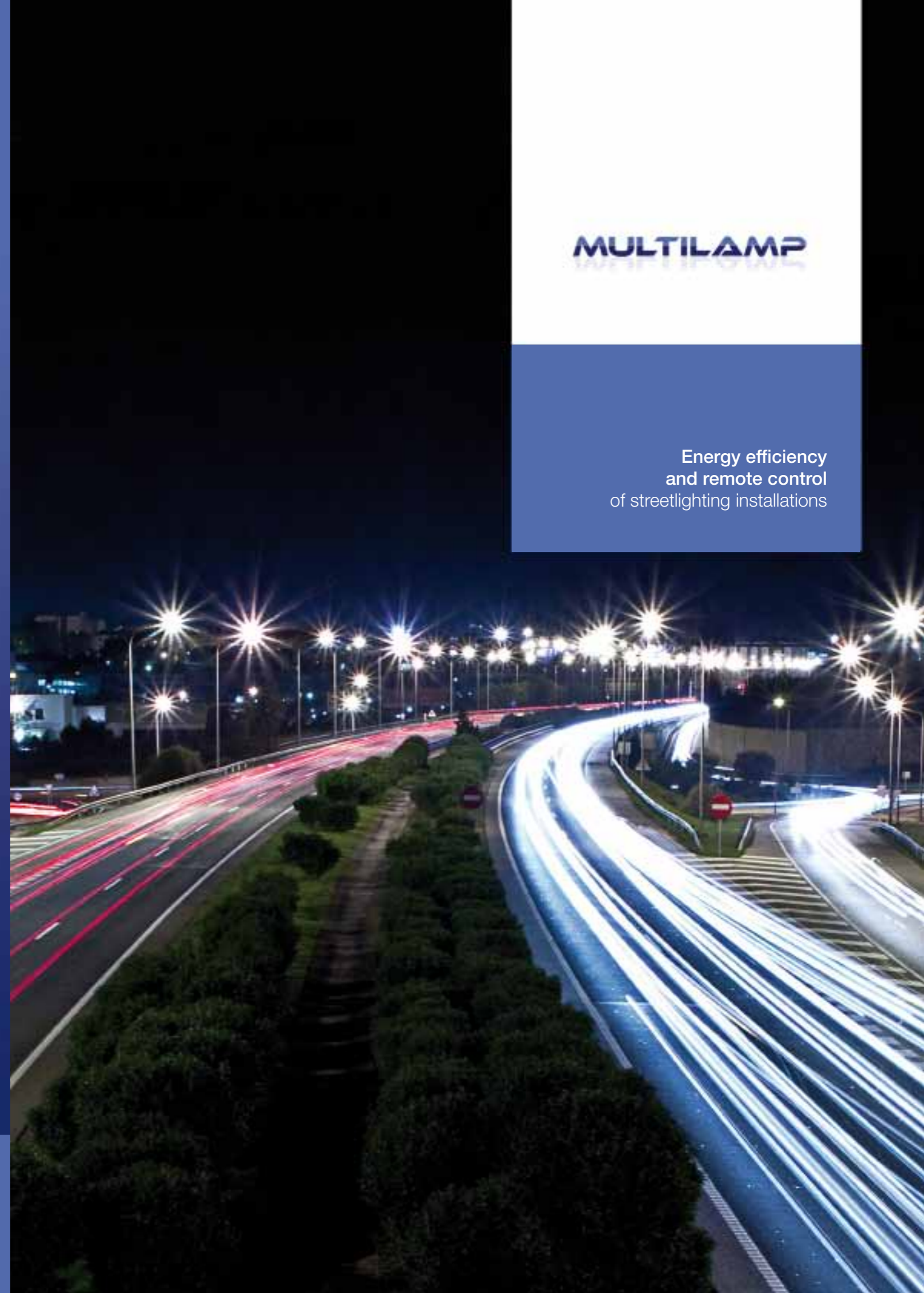
MULTILAMP

Energy efficiency and remote control
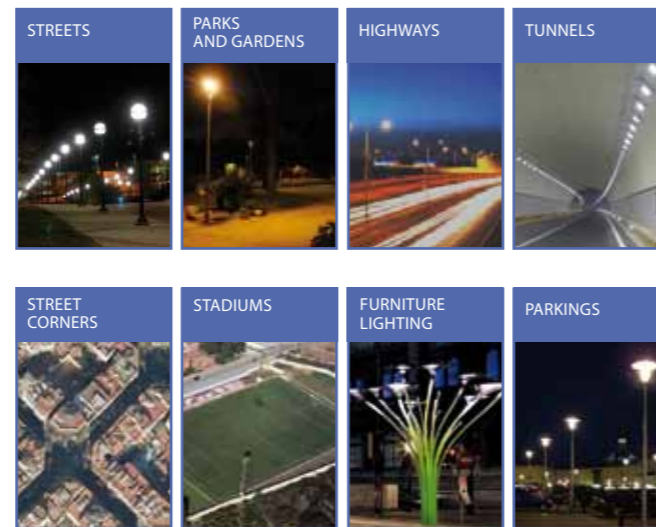of streetlighting installations

Multilamp is an outdoor lighting control solution designed to **reduce the energy consumption** produced by luminaires on installations and provide a mechanism to remote monitoring and control the status of luminaires. The system informs about the status of each lamp and the alarms generated when the luminaires fails, giving thus an **easy and safe control solution** for the installer and maintenance companies, reducing the operating costs of the installations and increasing the satisfaction of the municipalities and end users.

The flexibility of **Multilamp** allows the possibility to offer multiple lighting control solutions to the market: from basic systems that selectively switches on and off luminaires, up to complete solutions to dim every light individually or dim a group of lamps, **optimizing the energy saving** to a maximum level.
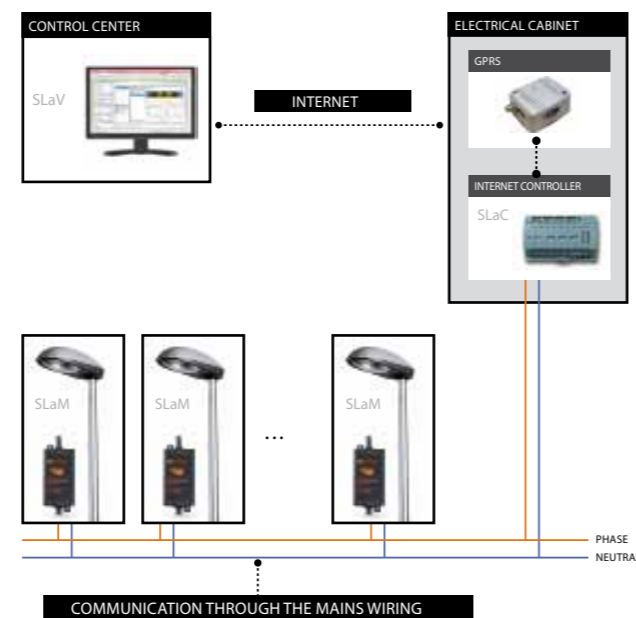
Multilamp is a true Open System, complying with the EN14908 standard (LonWorks®) and the interoperability guidelines defined by LonMark®, giving the installer and maintenance companies the possibility to define any requirement of outdoor lighting management, with the confidence that any installation could grow in the future and should be adapted at any time to the customer's demands.

Multilamp Applications

The **Multilamp** system actually provides a wide variety of applications in different fields, to cover any market demand in the streetlighting segment and to help reducing the energy and the operational costs of the installations.

STREETS	PARKS AND GARDENS	HIGHWAYS	TUNNELS
STREET CORNERS	STADIUMS	FURNITURE LIGHTING	PARKINGS

Example of the system
in a remote control installation

CONTROL CENTER
SLaV
INTERNET
ELECTRICAL CABINET
GPRS
INTERNET CONTROLLER
SLaC
SLaM   SLaM   ...   SLaM
PHASE
NEUTRAL
COMMUNICATION THROUGH THE MAINS WIRING

Energy saving and operating costs reduction

Multilamp has been designed to provide energy saving efficient solutions to help the customer reduce direct costs of the installations.

Energy saving

- Point to point control switches every luminaire when needed.
- Individual dimming the luminaire flux level on every point.
- Capacitor failure detection prevents extra energy waste for reactive energy.
- CO_2 emission reduction and tone equivalent oil.
- Reduction of luminous contamination using point to point control.
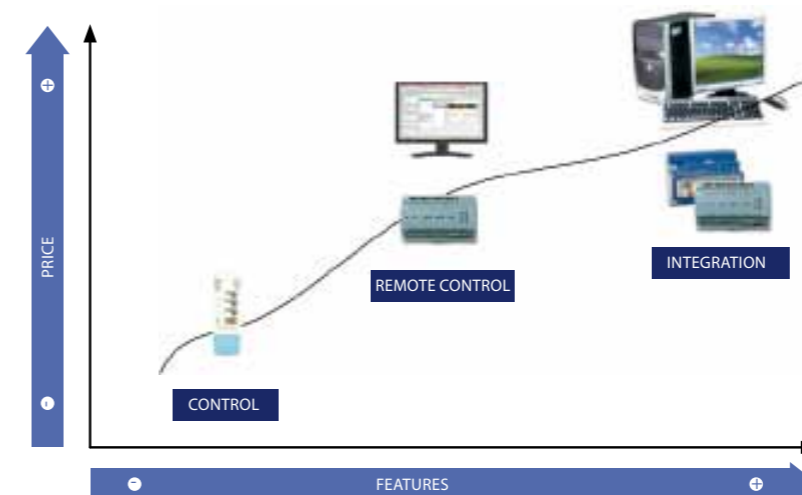
Operating costs reduction

- Reduce the night route made by maintenance companies.
- Provides a mechanism to planify maintenance.
- Reduces the time used on the maintenance actions.
- Predictive maintenance can be afforded with the system information.
- Automatic alarming management for maintenance companies.

All those items provides to the market a system oriented to get the best Return of Investment (ROI) according to the specifications and demands of every installation.
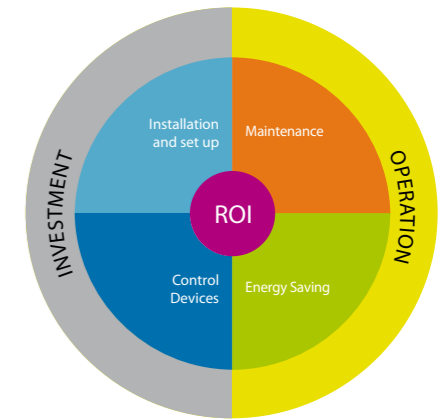
Control and Remote Control of installations
One solution for every budget

Multilamp is not only a remote control system for outdoor lighting applications. It can be also a control system with which low cost installations can also be achieved when the demand is focused only to do a management of switching and dimming zones of luminaires without remote control. The system has been designed to grow structured, from a simple control solution with low cost elements and no alarms to provide a first level of **energy saving**, to a global system with which the customer can afford the most demanding needs of remote control, optimizing the energy and operating costs and providing the maximum control on the installation.

PRICE
FEATURES
CONTROL
REMOTE CONTROL
INTEGRATION

INVESTMENT
OPERATION
Installation and set up
Maintenance
ROI
Control Devices
Energy Saving

CONTROL
- Point to point switch and dim of luminaires independent of the mains wire project installation.
- Flexible control of dimming ballasts by groups of luminaires.

REMOTE CONTROL
- Status on every luminaire.
- Remote management of schedulers to switch and dim lamps.
- Real time alarm failures monitoring.
- Alarm datalogger.
- Point to point switch and dim of luminaires independent of the mains wire project installation.
- Flexible control of dimming ballasts by groups of luminaires.

INTEGRATION
- Integration with other systems through MODBUS protocol.
- Total control of cabinet and luminaires.
- Remote management of luminaires.
- Remote control of schedulers.
- Remote alarm management of cabinet and luminaires.
- Point to point switch and dim of luminaires independent of the mains wire project installation.
- Flexible control of dimming ballasts by groups of luminaires.