![rabbit logo]

CPAnet

## CONTROL AND MONITORING SYSTEM

CPAnet is a modern system that is used for remote monitoring and management of street lighting through the website.

We refer to this system as intelligent as it is able to select the most appropriate moment and time to switch on/off the lights and adjust the light intensity. This considerably reduces power consumption. The system consists of controllers and software. System controllers switch on the lighting system by contactors also allowing control of power reducers operation. Built-in GPS receiver allows to pinpoint the geographical location of the lighting system, therefore to precisely specify the moment of sunrise and sunset. Time downloaded from the

GPS frees the user from having to correct the clock in the driver. The device is mounted in the lighting cabinet. Along with the connected lighting circuits it creates a system that can be remotely monitored by the user. CPAnet is user-friendly - the controller mounted in the lighting cabinet is automatically localized in the system. Each user after logging in to its account www.cpanet.pl has access to its subordinate structure of lighting (town, municipality). In addition, the user can secure access to the system with SMS password - as in banking systems.
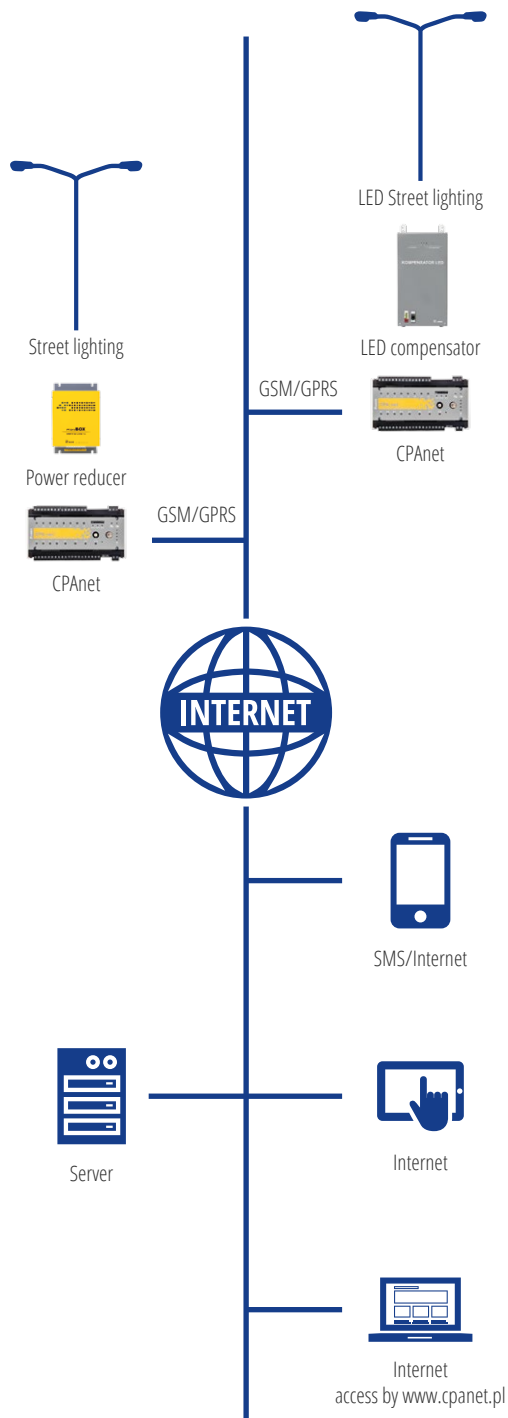
◤ WIRING DIAGRAM
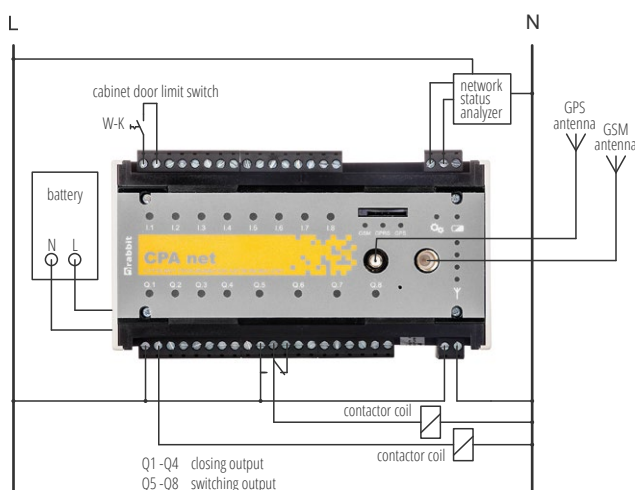
◤ TECHNICAL SPECIFICATIONS

- supply voltage: 85-264 VAC, 47-440 Hz

- driver size (width / height / depth): 150 x 85 x 110 mm

- width of the device: 9 modules

- number of outputs: 8 (4 circuit, 4 switch)

- outputs current capacity: AC1: 6 A/250 V AC; DC1: 6 A/24 V DC

- number of intputs: 8

- operating temperature: from -30°C to +85°C

- protection degree: IP20

- DIN rail mounting

- cooperation with a network analyzer/meter

◢ DIAGRAM OF THE SYSTEM

LED Street lighting

Street lighting

LED compensator

GSM/GPRS

CPAnet

Power reducer

GSM/GPRS

CPAnet

INTERNET

SMS/Internet

Server

Internet

Internet
access by www.cpanet.pl

◢ SYSTEM FEATURES

- full control and management through a website
- GPS time synchronization (time and geographical location downloaded from the GPS enable accurate calculation of sunrise and sunset on a given day and location)
- communication: GPRS, SMS
- automatic location of the controllers on the website map
- easy creation and management of groups of drivers
- possibility to emergency switch the lighting on/off via SMS (mobile phone or web pages)
- real-time monitoring and analysis of network parameters: current, voltage, power consumption, active power, reactive power
- archiving and visualization of measurement and alarm data
- reporting system
- user authentication (login, password) and giving them different powers
- remote software updates and settings on GPRS
- free SIM card for 24 months
- access to free software on the website
- application for mobile devices
- emergency power supply from a built-in battery
- LEDs on the front panel, indicating the status of inputs and outputs, GSM signal, GPRS, GPS, network coverage, battery charging status
- 6 output modes: astronomical, daily, cascade, service, reduction, weather
- possibility of introducing 10 exceptions to the illumination work schedule (e.g. public holidays, local holidays, etc.)
- ability to set separate patches for summer and winter
- immediate information on the occurrence of alarm situations, i.e. power failure, failure of individual phases, power excess/reduction, cabinet openings
- remote lightning power switch on/off during maintenance
- possibility to remotely program lighting with APC-2 and APC-LED systems
- possibility to turn on/off lighting via SMS (e.g. sports fields)
- possibility to customize road lighting to the current volume of traffic (based on data from an external traffic control system)
- system designed for use both in new and existing lighting systems
- temporary lack of access to the Internet does not interfere with operation of the controller
- virtual photocells can be connected, allowing an immediate response to severe weather changes. Its proper use allows achieving substantial savings.