



General Description

IPC1010 is the first product in a growing line of E3CONTROL™ intelligent power controllers (IPC). These modules are the core element of our innovative control and monitoring system for streetlighting applications. They provide accurate energy consumption and end point status logging as well as actuator outputs (e.g. relays). Alarms support early detection of overload and other abnormal situations (e.g. load failure). All these features help to optimize maintenance calls and minimize energy consumption.

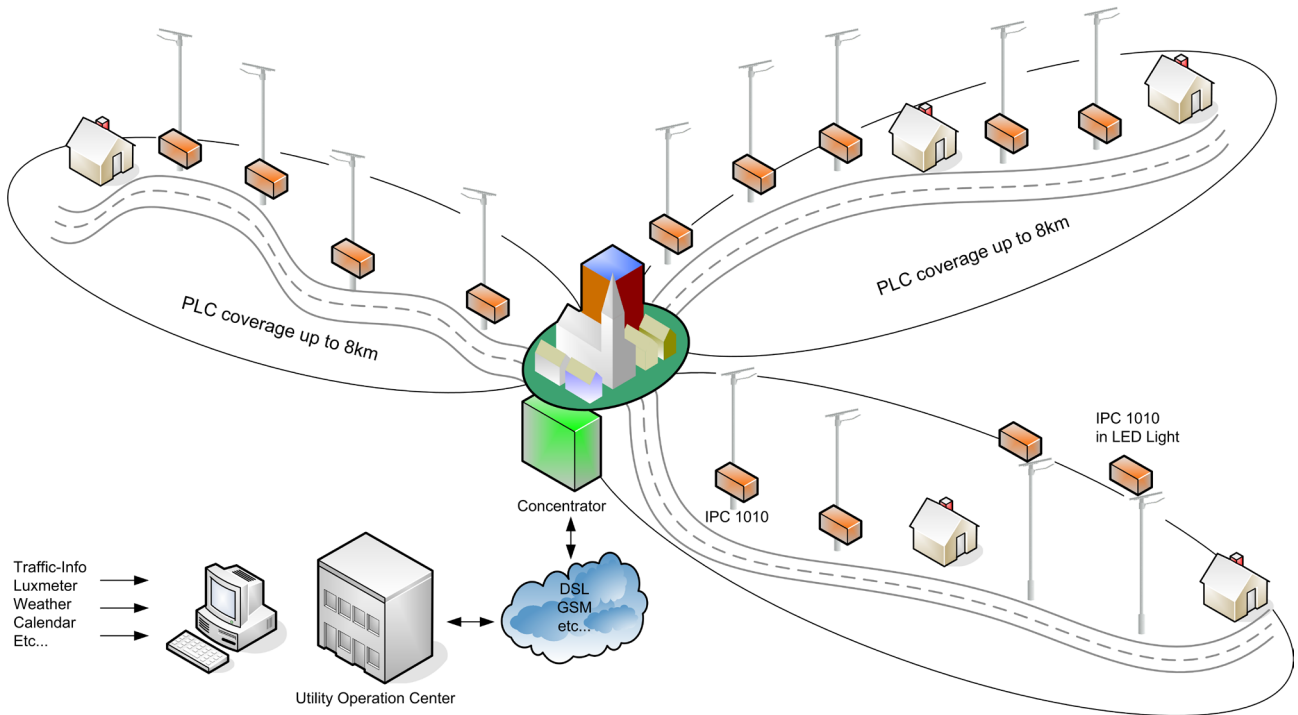
Data transfers between E3CONTROL™ IPCs and a central E3CONTROL™ concentrator use reliable powerline communication (PLC) technology which avoids the need for extra cabling. All control and measurement functionality can be accessed via an easy to use web interface.

With its robust, watertight IP67 enclosure the E3CONTROL™ IPC1010 is specifically designed for harsh environments and withstands even large temperature and power variations.

Features

- 2 Mono-stable or 1 Bi-stable Relay Outputs (250VAC, 10A). Further Control Interface Options on Request
- Watertight IP67 Enclosure Withstands Harsh Environment
- Non-intrusive Voltage, Current and Frequency Measurement through Current Transformer
- Energy and Power Measurements (Active, Reactive, Apparent, Power Factor)
- Alarms with Automatic Notification via SMS (through E3CONTROL™ Concentrator)
- Data Logging in E3CONTROL™ Concentrator
- Data Access via Web Browser (through E3CONTROL™ Concentrator)
- Reliable Powerline Communication (Cenelec B; FCC, ARIB Cenelec A on Request)
- Up to 8 km Communication Range between Concentrator and IPC (with Intermediate IPCs Acting as Repeaters)
- Internal Temperature Sensor
- 2x Extension Ports for External Temperature/Humidity Sensors





Physical

Length	140 mm
Width	80 mm
Height	65 mm
Enclosure	Watertight (IP67)

AC Supply

Nominal Input Voltage	100 - 250 Vrms
Input Frequency	50 - 60 Hz
Power Consumption	< 1 W
Input Cable / Plug	Customer specified

Sensors & Actuators

Internal Sensor	Temperature
External Sensors	2 extension ports for humidity and temperature sensors
Actuators	1 bi-stable or 2 mono-stable relays (250 V, 10 A) Other options on request

Communication

Powerline	Highly reliable narrowband Powerline communication (Cenelec A, B, FCC or ARIB)
Distance	1 km (8 km with repeaters)

Measurements / Alarms

P	[W]		Real power
Q	[VAR]		Reactive power
S	[VA]		Apparent power
Ep	[kWh]		Real energy
Eq	[kVARh]		Reactive energy
Es	[kVAh]		Apparent energy
Urms	[V]		Line voltage
Irms	[A]	Alarm	Output current
Upk	[V]	Alarm	Peak line voltage
f	[Hz]	Alarm	Line frequency
PF	N/A		Power factor
Ti, T1, T2	[°C]	Alarm	Internal temperature and values from external temperature sensors
H1, H2	[%]		Humidity values from external sensors

