

PLC-800

Concentrator for PLC systems

Description

The **PLC800** is the main element of **CIRCUTOR's** Smart Metering systems. The main function of the **PLC800** concentrator is to manage the electrical distribution network with the use of **CIRWATT** electrical energy meters. The information is gathered using the electrical cable of the distribution network using the so-called 'PLC Communications' (Power Line Carrier).

The **PLC800** concentrator is installed in transformer substations and it uses different communications systems, such as Ethernet, GSM and GPRS, which offer various positions to access the information and interact with the system.

Application

The system offers *Plug&Play* functionalities, so that the **CIRWATT** electrical energy meters are detected automatically by the **PLC800** concentrator, downloading all information to the memory, such as the energy load curves, events and billing closures. The **PLC800** concentrator also offers the possibility of automatically sending this information to an ftp server.

In addition, it offers various specific functions to manage the electrical energy demand, loss control and fraud detection. All of these actions can be used for the preventive maintenance and detailed monitoring of the behaviour of the electrical distribution network.



Features

Power supply	
Working voltage	127 V to 230 V
Power consumption	~7 W and ~12 V·A
Environmental influences	
Operating temperature range	-20 °C to +60 °C
Storage temperature range	-40 °C to +85 °C
Humidity	95% max.
Processor	
Microprocessor	Samsung S3C2440-300
Display	
Type / Size	TFT LCD / 3,5"
Backlight	LED
PLC – Power line communications	
Type	DCSK with repetitive system
Hardware	CENELEC A or CENELEC B
Connection	3 or 4 wires (with dual connection option)
Protection class	II
* For other configurations, please ask	

Data memory	
Type	FLASH (SD card)
Capacity	528 MB
Battery	
Type	Lithium
Position	Internal
Working Life	>20 years @ 25 °C
Modem	
Type	GSM and GPRS
Band	Quadriband
Card	SIM
Ethernet Port	
Type	IEEE 802.3
Connector	RJ-45
Speed	10/100 Mbit
USB Ports	
Version	USB 1.1
Type	Female, type A

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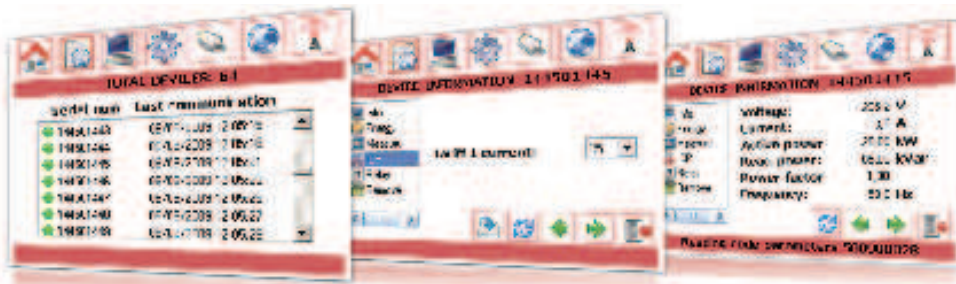
Standards

IEC 61000-4-2	Electrostatic discharges : 8 kV
IEC 61000-4-3	Electromagnetic fields (80 Mhz to 2 Ghz): 10V/m 30V/m
IEC 61000-4-4	Fast transient burst test : 4 kV
IEC 61000-4-5	Surge test in current and voltage circuits : 6 kV
IEC 62052-11	Impulse voltage 1,2/50 µs: 8 kV
IEC/CISPR 22	Radio interference suppression: Class B
UNE-EN 50470	Current and voltage circuits under load: 4 kV

References

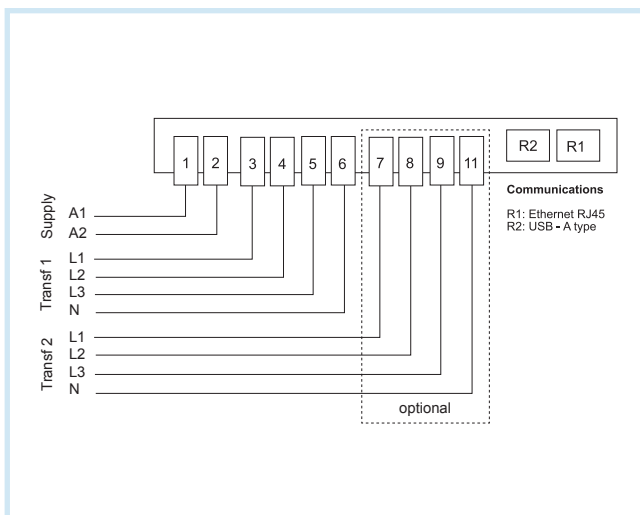
Power supply voltage 127 ... 230 Vac	PLC Communications band	Metering voltage 3x230/400 V	Number of PLC Communications inputs	GSM/GPRS Modem	USB Ports	Ethernet Port	Type	Code
●	A	●	1	●	2	1	PLC800-U-1-2M00-12-0	Q45210
●	B	●	1	●	2	1	PLC800-U-1-4M00-12-0	Q45310
●	A	●	2	●	2	1	PLC800-U-1-2M2M-12-0	Q45211

Screens



- Connected meter list
- Modification of contracted currents
- Open/close the internal relay
- Electrical parameters readings

Connections



Dimensions

