

PCR321

Single Phase electronic PLC Meter



Technical Data

- » Single phase 2 wire network
- » Active energy measurement
- » Class 1 for active energy
- » Current test
- » 4 tariffs, 12 time zones
- » 2 sets of tariff structures
- » 3 months historical energy data storage
- » Event detection: current, battery
- » Password management
- » Relay control
- » To IEC 62052-11 and IEC 62053-22

Basic Functions

- Active energy class 1 according to EN 61036 and EN 61268
- Two communication modes: power line carrier and infrared communication
- Multi-tariff support: multiple tariff and time period can be configured
- Prepayment support: Credit is downloaded into the meter. Limit value generates notification
- Contractual limit control: built-in Relay Enables the operator to cut off the power
- Configurable LCD display: providing rich and configurable display dataset
- Load restriction adjustment: contractual maximum power and demand can be adjusted
- Load profile recording: 35 days of active load curve can be saved
- Quality service data recording: detecting and recording of voltage interruption and variation
- Anti-tamper function: detecting of illegal tie-in or unauthorized access to the meter, cover open switch
- Table-like data access: providing flexible data access
- Meter working status diagnosis: giving internal hardware abnormality and reverse phase line connection if any
- Using as a repeater: the meter can be taken as a repeater at the same time to extend the distance of PLC Communication
- Secured communication mode: password authentication method to protect the writing operation in PLC mode and reading & writing operations in local infrared mode
- Software can be updated via IR comm. Or RS232 using a PC or HHU.
- Push button for data scrolling and power restore.



Yesterday's Maximum is Today's Minimum!

METERING SYSTEM	1P2W
CURRENT RATING	I _b =10A I _{Max} = 60A
REFERENCE SUPPLY VOLTAGE	220V±20%
REFERENCE FREQUENCY	50 Hz ± 5%
MEASUREMENT PARAMETERS	Electrical: Import Active Energy, Instantaneous Current
METER CONSTANT	Active Energy: 1600 imp/kWh
ACCURACY CLASS	Class 1.0
TARIFF FEATURES	4 Tariff available for Import Active Energy.
REFERENCE STANDARDS	IEC 62053-21(Class 1.0) / IEC 62052-11
POWER CONSUMPTION	Voltage circuit ≤ 10VA (2W)
	Current circuit ≤ 4VA
SHORT TIME OVER CURRENT	20 times I _{max} for 0.5sec
STARTING CURRENT	0.4% of I _b
CALIBRATION OUTPUT	High Intensity LED for its testing /calibration for kWh
RTC ACCURACY	Less than 1sec/dav
AMBIENT TEMPERATURE RANGE	Specified operating range: -20°C to +60°C
	Operating temperature: -25°C to +65°C
	Transport and storage: -30°C to +70°C
ELECTROMAGNETIC COMPATIBILITY (EMC)	Meets the IEC requirements.
	Electrostatic discharges: As per Clause 7.5.2 of IEC 62052-11, 8kV (contact/indirect discharge)
	Radiated Electromagnetic high frequency fields: As per Clause 7.5.3 of IEC 62052-11, Frequency Range 80MHz to 2000MHz
	Electrical fast transient/burst: As per Clause 7.5.4 of IEC 62052-11, Test Voltage 4kV
	Radio Interference Measurement: As per Clause 7.5.8 of IEC 62052-11 & CISPR 22
	Surge voltage: As per Clause 7.5.6 of IEC 62052-11, Test Voltage 4kV Impulse Voltage: As per IEC 62053-21/22. Test Voltage 6kV A.C Voltage Test: As per IEC 62053-21/22, A.C Voltage 2kV
PROTECTION: DUST AND WATER	IP 51 as per IEC60529 / IEC 62052-11
COMMUNICATION	Infrared Communication port: a) Baud Rate: 1200bits/s b) Protocol: As per MODBUS
	PLC Communication: a) Baud Rate: 600bits/s
MATERIAL CASE	High Impact strength flame retardant polycarbonate
FAULTS AND TAMPER	Reverse running detection and cover open switch.
DISPLAY TYPE	Custom built LCD Display
MEMORY STORE	3 months billing data
MECHANICAL	Dimensions: W110 mm x H154mm x D64mm

