

# Single-phase electricity meter

## CANGU



### Application


Multipurpose electricity meter for single-phase two-wire networks, with extended functionality. It allows direct measurement of active and reactive energy in multi-rate prepayment metering mode or in a fully autonomous credit mode. Interchangeable communication modules and a built-in contactor make the device a perfect foundation for Smart Metering systems.

### Features

- Bidirectional and reverse measurement of active and reactive energy
- Measurement of electrical network parameters: effective current and voltage, frequency, power factor
- Measurement of instantaneous power and maximum power
- Recording load profile
- Operating mode: prepayment, credit or switched prepayment-credit
- Advanced prepayment functions
- Manual or automatic ending of a billing period
- Memory of at least 21 billing periods data
- Real-time clock managing two switchable complex calendars
- Calendars allowing to define any number of special days and permanent holidays, and 240 movable holidays
- Current and power limiting features
- Event logging
- Optical port and built-in communication port: serial (RS-485 or RS-232), M-Bus slave or other
- Removable communication module: PLC, GSM, RS-232/RS-485, LAN, SRD radio or other
- TV remote control via infrared port
- Specialized LCD display
- Measurement data can be read from the display (and by optical connection if powered by a replaceable ½ AA 3.6 V battery) in the event of power failure

Meter's functions depend on the operation mode

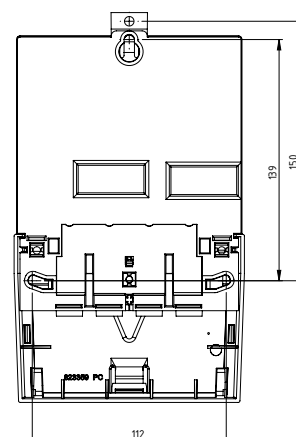
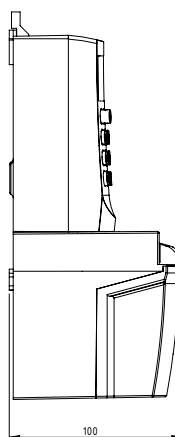
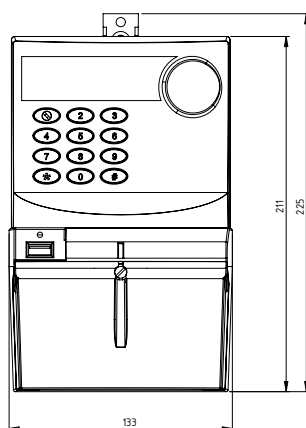
Do you know that...



The name **CANGU** is a reference to a **KANGAROO** whose distinctive movement allows it for a better energy management.

## Podstawowe parametry techniczne

Model	CANGU	
Connection method	direct	
Rated voltage $U_n$	[V]	230
Reference current $I_{ref}$	[A]	5 or 10 or 15
Maximum current $I_{max}$	[A]	40 or 60 or 80
Measurement accuracy of active energy	A or B	
Measurement accuracy of reactive energy	2 or 3	
Power consumption in current circuit	[VA]	0,1
Power consumption in voltage circuit	[W] / [VA]	<1 / <3
Electric strength	[kV]	4 (AC 50 Hz), 6 (surge 1,2/50 $\mu$ s)
Impulse frequency	[imp/kWh]	2560 or 5120
Clock	Internal RTC, accuracy not lower than 0.5 s/24 h at 23°C, synchronised with the AMR system.	
Communication	<p>Optical port, baud rate configurable from 300 to 19200 Bd.</p> <p>Second communication port: serial RS-485, RS-232 or M-Bus slave</p> <p>Removable communication module: PLC, GSM, RS-232/RS-485, LAN, SRD radio or another.</p> <p>Protocol support: comprehensive proprietary protocol dedicated for AMI systems, EN 62056-21 (IEC1107).</p> <p>Infrared port (RC5).</p>	
Inputs and outputs	Pulse output or relay output.	
Event logging	End of a billing period, power loss and return, current and power overload, synchronisation of the real-time clock, changed configuration of the calendar, unauthorized removal of the terminal box cover, magnetic field tampering with date and time stamp.	
Display	A dedicated LCD display (showing manufacturer's or OBIS error codes, EN 62056-61)	
Temperature of operation	from -40°C to 70°C	
Casing	IP 54, class II insulation	
Standards	MID Directive (B+D) EN 50470	



Type designation

CANGU 22APC

- LCD display
- PLC communication module
- system meter
- maximum current: 60 A
- base current: 5 A