

SMART ELECTRICITY METER

SM-007

Direct connected

Single Phase Smart Electricity Meter

Exceeds Class 1.0 accuracy



Introduction

The SM-007 Smart Electricity Meter is an electronic device designed for sub-metering applications, checking and monitoring energy consumption of buildings and homes and for energy audits.

It can be integrated into an Advanced Metering Infrastructure (AMI) to cover a wide geographical area.

The meter uses state-of-the-art technology and has in-built Wi-Fi and Bluetooth to allow the user and system administrator to connect to it using mobile applications or via a web interface to access real-time and historical data.

Where Wi-Fi networks are unavailable, other connectivity options like GSM/GPRS are also possible for standalone scenarios where remote access to the meter is still desired.



METER SPECIFICATIONS	
AC Electrical Characteristics	
Nominal Voltage	240 V
Maximum Voltage	300 V
Minimum Voltage	120 V
Maximum Current (Imax)	100 A
Nominal Frequency	50 Hz
Accuracy Class	1
Power Consumption	≤ 2 W
Measurements	kWh
Memory	
Type	Flash
Retention period	50 years
Environmental Conditions	
IP Rating	IP65
Temperature Range	0°C to +70°C
Humidity Range	up to 90% (non-condensing)
Service Life	20 years
Display	
LCD	4-Line, 20 digit display
Display mode	Automatic
Communication	
Optical interface	Standard Optical Port (IEC 62056-21)
Wireless	2.4 GHz Wi-Fi, 802.11n up to 150 Mbps Bluetooth v4.2 BR/EDR GPRS/GSM (for Data Gateway Device only)
Wired	RS-485
Mechanical	
Dimensions (LxBxH)	243 x 240 x 60 (mm)
Weight	1kg (approximately)
Meter Housing	Flame Retardant Polycarbonate
Insulation	Protective Class II

METER FEATURES	
FEATURE	DESCRIPTION
Instantaneous Data Display	Current (A), Voltage (V), Energy (kWh) Power Factor, Frequency, Date & Time stamp
Tamper/Event Detection	Reverse Connection Current Bypass Connection Overload Over Voltage Under Voltage Parameter Change Meter Cover Open
Alarms	LED Indicator Audible Alarm Messages on LCD
Relay operation	Local or Remote Disconnection
Load Integration Period	5 - 60 minutes