



THREE PHASE 4 WIRE ENERGY METER

Model No: SMART-SME 202

- CT Operated
- Plug-in Connction
- RJ 12 100mA / 33mV Current Input
- Multi-Parameter Measures
- THD of Voltage and Current
- RS 485 Modbus RTS and Pulse Output

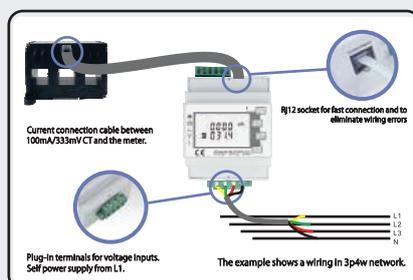


INTRODUCTION

The Smart Controller is a Three Phase 4 wire multi-function energy meter. It measure and display the characteristic of 3p4w network, including voltage, current, power active and reactive energy imported and exported, thd, power demand, frequency, power factor etc.

The meter use plug-in terminals for both voltage input current input. With 3-in-1 current transformer meter provides easy an quick and error-free connection solution. Equipped with RS485 communication port and 2 pulse outputs the meter ideal product for sub-metering in low voltage application.

LOAD SOLUTION



SPECIFICATION

Nominal Voltage(Un)	3x230/400 V ac
Operational Voltage	60%~120% of Un
Instation Capabilities	
- AC Voltage withstand	4KV for 1 minute
- Impulse Voltage withstand	6KV-1.2μS
Basic Current (Ib)	100mA or 333mV CT input
Maximum Rated Current (Imax)	0.4% Ib-Imax
Operational Current Range	20 Imax for 0.01s
Over Current withstand	50 or 60Hz
Internal Frequency Range	≤ 2W/10VA
Internal Power Consumption	Configurable
Pulse Output 1	3200 imp/kWh
Display	LCD
Max Reading	9999999.9 kWh/kVarh

PERFORMANCE CRITERIA

Operating Humidity	≤ 90%
Storage Humidity	≤ 95%
Operating Temperature	-25°C - +55°C
Storage Temperature	-40°C - +70°C
Reference Temperature	23°C± 2°C
International Standard	IEC 62053-21 / EN50470-1/3
Accuracy Class	Class1/Class B
Installation Category	CAT III
Mechanical Environment	M1
Degree of Pollution	E2
Protection Against Penetration of Dust and Water	2
Insulating Encased Meter of Protective Class	IP51(indoor)
Attitude	II
Electrostatic Discharges	8kV contact / 15kV air gap
Electromagnetic HF Fields	EN 55022

ACCURACY

Voltage, Current	0.5%
Frequency	0.2% of mid-frequency
Power Factor	1% of unity (0.01)
Active Power, Apparent Power	±1% of range maximum
Reactive Power	±1% of range maximum
Reactive Energy (Varh)	Class 2
Active Energy (Wh)	Class 1

MODBUS

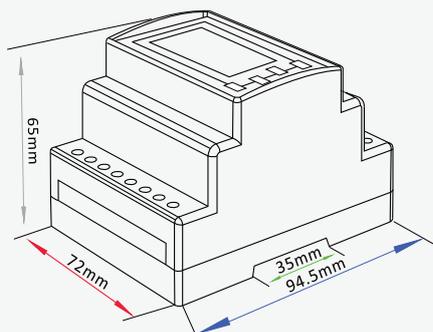
Bus Type	RS485(semi-duplex)
Protocol	Modbus RTU
Baud Rate	2400/4800/9600/19200/38400bps
Address Range	1-247
Max. Bus loading	64pcs
Communication Distance	1000M
Parity	EVEN/ODD/NONE
Data Bit	8
Stop Bit	1

M-BUS (OPTIONAL)

Bus Type	M-bus
Protocol	EN13757-3
Baud Rate	300/600/1200/2400/4800/9600
Parity	NONE/EVEN/ODD
Stop Bit	1 or 2
Primary Address	1 to 250
Secondary Address	00 00 00 01 to 99 99 99 99



DIMENSIONS



Height 94.5mm
Width 72mm
Depth 65mm



WIRING DIAGRAM

