



THREE PHASE MULTI-FUNCTION POWER ANALYZER

Model No: SMART-SME 203D

- 100A Direct Load
- 4 Module Wide
- Work with 3P 4W/ 3P 4W/ 1P 2W
- Bi-Directional Measurement
- 2 Pulse Outputs
- RS 485 Modbus or M-bus Communication
- Multi-Tariffs



INTRODUCTION

The Smart Controller series is a Three Phase multi-function DIN rail meter. It can measure and display the characteristic of 1p2w, 3p3w and 3p4w supplies, including voltage, including voltage, current power active and reactive energy imported or exported. Energy is measured in terms of kWh, kVarh. Max demand current can be measured over preset periods of up to 60 minutes.

The 100A series has wonderful industrial design, big size LCD and touch buttons. All electronic parameters can be set with the button and the configuration is password protected. It can directly connect to 100A max.

Saving the cost to install external CT. Built-in interface provide pulse and RS485 Modbus RTS output.

SPECIFICATION

Nominal Voltage(Un)	3x230/400V ac
Operational Voltage	80%~120% of Un
Instation Capabilities	
- AC Voltage withstand	4KV for 1 minute
- Impulse Voltage withstand	6KV-1.2μS
Basic Current (Ib)	10A
Maximum Rated Current (Imax)	0.4% Ib-Imax
Operational Current Range	30 Imax for 0.01s
Over Current withstan	50 or 60Hz
Pulse Output	≤ 2W/10VA
Display	LCD
Max Reading	999999.99 kWh/kVarh

PERFORMANCE CRITERIA

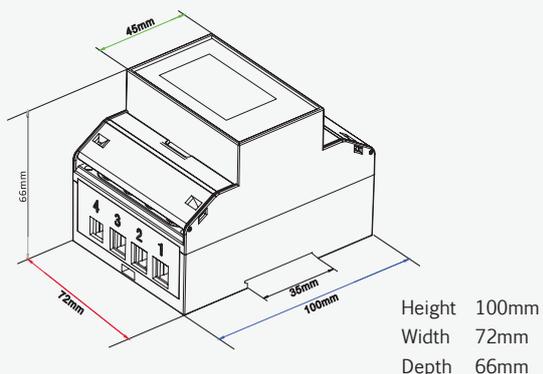
Operating Humidity	≤ 90%
Storage Humidity	≤ 95%
Operating Temperature	-25°C - +55°C
Storage Temperature	-40°C - +70°C
Reference Temperature	23°C± 2°C
International Standard	IEC 62053-21 / EN50470-1/3
Accuracy Class	Class1/Class B
Installation Category	CAT III
Mechanical Environment	M1
Degree of Pollution	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	IEC 61000-4-3
Electrical Fast Transients	4kV

MULTI-TARIFF

Time Clock Accuracy	< 1s/day
Tariffs	4
Time Segments	10



DIMENSIONS



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

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

PULSE OUTPUT

Pulse Outputs	2
Pulse Output Type	Passive
Pulse Output 1	Configurable
Pulse Width	200/100(default)/60ms
Pulse Output 2	400imp/kWh



WIRING DIAGRAM

