

THREE-PHASE METER

EASTRON SDM630 MV-CT Multi-functional power analyzer

Item code **M0015**

- › CT 333mV & PT operated
- › Works with 3P4W / 3P3W / 1P2W
- › 4 Modules wide
- › Bi-directional measurement
- › 2 Pulse outputs
- › RS485 Modbus communication
- › Measures kWh, kvarh, W, var, VA, PF, Hz, dmd, V, A, THD and more



FEATURES



Perfect for submetering and remote monitoring Ideal meter for industrial environments

- › Perfect meter to measure and display three-phase four wire (3p4w) supplies with 333mV CTs.
- › High accuracy and remote communication makes the meter perfect for use in single and three-phase networks.

This Series has been assessed and certified as meeting the requirements of EC Directive 2004/22/EC.
The EC Type Examination Certificate Number is 0120/SGS0142.

DESCRIPTION

The SDM630MV-CT is an advanced digital three-phase multifunction energy meter, which can be used for both single and three-phase networks. The meter features an LCD screen for perfect reading of a broad range of electrical parameters.

It enables convenient metering as it can be configured to work with a wide range of CT's with 333mV output. Perfect meter to measure and display three-phase four wire (3p4w) supplies: Active energy (kWh), reactive energy (kvarh), active power (W), reactive power (var), apparent power (VA), voltage (V), current (A), power factor, demand and frequency.

Its high accuracy, remote communication and ease of installation makes the 333mV CT Modbus meter the perfect meter for industrial environments with a higher power demand or increased usage, like shopping malls, office buildings, factories and infrastructure.

The multifunction DIN-rail meter is reliable and durable and can be powered from an external AC or DC supply or directly from the monitored supply. Onscreen setup and button navigation simplifies the installation process.

SPECIFICATIONS

Nominal voltage(Un)	› 3x230/400 V ac	Operational frequency range	› 50 or 60Hz
Operational voltage	› 60%~120% of Un	Power consumption per phase	› ≤ 2W/10VA
Insulation capabilities	› AC voltage withstand › 4KV for 1 minute	Pulse output 1	› Configurable
	› Impulse voltage withstand › 6KV-1.2μS	Pulse output 2	› 3200 imp/kWh
Rated current (Ib)	› 333mV CT input	Display	› LCD
Operational current range	› 0.4% Ib-Imax	Max reading	› 9999999.9 kWh/kVarh
Over current withstand	› 20 Imax for 0.01s		

PERFORMANCE CRITERIA

Operating humidity	› ≤ 90%	Electromagnetic environment	› E2
Storage humidity	› ≤ 95%	Degree of pollution	› 2
Operating temperature	› -25°C - +55°C	Accuracy class	› Class1/Class B
Storage temperature	› -40°C - +70°C	Electrostatic discharges	› 8kV contact / 15kV air gap
Reference temperature	› 23°C± 2°C	Electromagnetic HF fields	› IEC 61000-4-3
International standard	› IEC 62053-21 / EN50470-1/3	Electrical fast transients	› 4kV
Installation category	› CAT III	Surge	› 4kV
Mechanical environment	› M1	Radiated & conducted emissions	› EN 55022
Insulating encased meter of protective class	› II	Protection against penetration of dust and water	› IP51(indoor)

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	› 2400/4800/9600/19200/38400 bps
Address range	› 1-247
Max. Bus loading	› 64pcs
Communication distance	› 1000M
Parity	› EVEN/ODD/NONE

WIRING DIAGRAM

3 PHASE 4 WIRE

1 PHASE 2 WIRE

3 PHASE 3 WIRE

65mm

72mm

35mm

94.5mm

AUXILIARY SUPPLY: 5(L), 6(N)

POWER OUTPUT: 7(L), 8(N)

RS485: 9(1), 10(2), 11(L), 12(N), 13(B), 14(A)

Grounding: +, -, + GND

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