

Datasheet

- Three phase 1/5A Current transformer operated
- Configurable pulsed output
- ETL registered
- Multi-parameter measurement
- Multi-tariffs
- Modbus communication
- Accuracy class 1.0 (Active Energy)
- Bi-directional measurement for kW and kWh

The SDM630MCT ETL series is an advanced multi-function three phase energy monitoring solution with optional outputs such as pulses, RS485 RTU Modbus. Equipped with configuration and display buttons for ease of navigation through the various parameters and settings. Housed for DIN rail mounting, IP51 protection and 1/5A current transformer operated. The required current inputs are obtained via current transformers. This meter can be configurable to work with a wide range of C s, giving the unit a wide range of operation. The meter is ETL Listed by Intertek.



Specification Table

Specification	
Nominal voltage(Un)	100-277V 3~ L-N, 100-480V 3~ L-L
Operational voltage	80% - 120% of Un
Insulation capabilities	
- AC voltage withstand	4KV for 1 minute
- Impulse voltage withstand	6KV-1.2μS
Rated current (Ib)	1A/5A CT or 40mA/100mV/333mV CT input
Operational current range	0.4% Ib-I _{max}
Over current withstand	20 I _{max} for 0.5s
Operational frequency range	50 or 60Hz
Power consumption per phase	≤ 2W/10VA
Pulse output 1	Configurable
Pulse output 2	3200 imp/kWh
Display	LCD
Max reading	9999999.9 kWh/kVarh

Accuracy	
Voltage, Current	1.0 % or 0.5% option available
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

Performance criteria	
Operating humidity	≤ 90%, no condensing
Storage humidity	≤ 95%, no condensing
Operating temperature	-25°C - +55°C/-40 - + 70(optional)
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
Electromagnetic environment	E2
Degree of pollution	2
Protection against penetration of dust and water	IP51(indoor)
Insulating encased meter of protective class	II
Electrostatic discharges	8kV contact / 15kV air gap
Radiated & conducted emissions	EN 55022

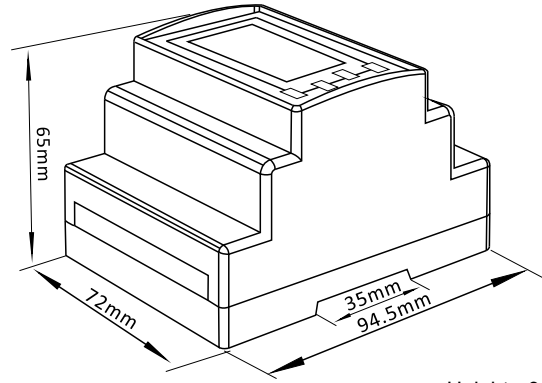
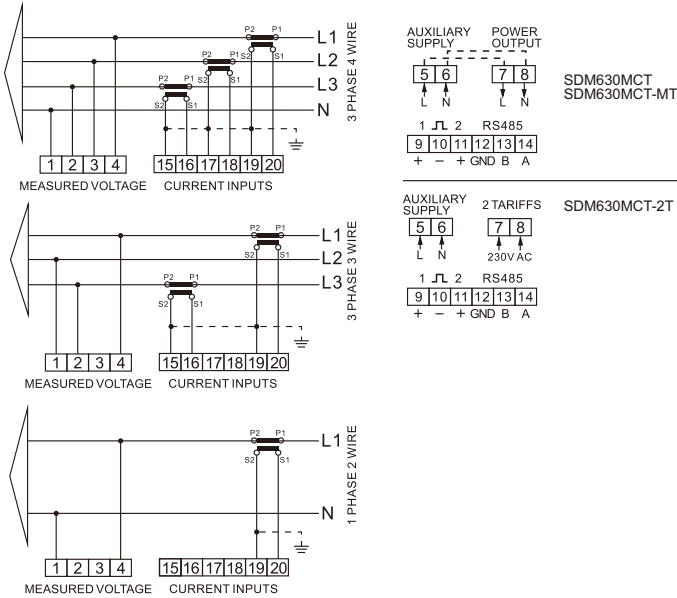
Modbus	
Bus type	RS485(semi-duplex)
Protocol	Modbus RTU
Baud rate	2400/4800/9600/19200/38400bps
Address range	1-247
Max. Bus loading	64pcs
Communication distance	1000M
Parity	EVEN/ODD/NONE
Data bit	8
Stop bit	1

For more information on these products, please contact our sales team on 86 0573 83698881 or email sales@eastrongroup.com

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Wiring Configuration

Dimension Drawing



Height 94.5mm
Width 72mm
Depth 65mm

Ordering Options

Meter Type	Description of Meter
SDM630MCT-ETL	3PH-4W, 3PH-3W, 1PH-2W, 3x230(400)V, 1A or 5A CT input, Class 1.0 50/60Hz, backlighted LCD display, 2 pulse outputs, RS485 Modbus RTU. Measures kWh, kVarh, W, Var, VA, V, A, PF, THD, Hz, Max.DMD, Imp_kWh, Exp_kWh etc.
SDM630MCT-2T-ETL	3PH-4W, 3PH-3W, 1PH-2W,, 3x230(400)V, 1A or 5A CT input, 50/60Hz, backlighted LCD display, 2 pulse outputs, RS485 Modbus RTU, 2 Tariffs. Measures kWh, kVarh, W, Var, VA, V, A, PF, THD, Hz, Max.DMD, Imp kWh, Exp_kWh etc.
SDM630MCT-MT-ETL	3PH-4W, 3PH-3W, 1PH-2W, 3x230(400)V, 1A or 5A CT input, Class 1.0 50/60Hz, backlighted LCD display, 2 pulse outputs, multi-tariffs. RS485 Modbus RTU. Measures kWh, kVarh, W, Var, VA, V, A, PF, THD, Hz, Max.DMD, Imp_kWh, Exp_kWh etc.

Conformity References

Electromagnetic Compatibility: EN61326-1:2013 & EN61326-2-3:2013

Low Voltage Directive: EN 61010_1:2010+A1:2019 & EN 61010-2-30:2010

Conforms to UL Std.: 61010-1, 61010-2-030

Certified to CSA Std.: C22.2 No.61010-1, 61010-2-030