

DIN Rail Mounted / Three Phase / (CT) SDM630MCT-LoRa Series

Datasheet

- Three phase 1/5A current transformer operated
- ETL, MID certified
- High accuracy, Class 1 / Class 0.5s
- Multi-parameters measurement
- Bi-directional measurement for kW and kWh
- Configurable pulsed output
- Built-in LoRaWAN communication
- Confirmations/ Offline detection available
- Support auto-upload mode for uploading data to back server actively.
- Support auto-resume mode for suddenly power off of the gateway when resume.
- Download/ Upload time interval can be set or adjusted
- Wide range of LoRa frequency band (EU868/AS923/CN433/CN470/AU915/US902 MHz, etc.)



SDM630 MCT-Lora is an advanced multi-function three phase energy monitoring solution with built-in LoraWAN module. It measures and displays the characteristics of single phase two wire(1p2w) , single phase three wire(1p3w), three phase three wire(3p3w,) and three phase four wire(3p4w) supplies, including KWh, kVArh, kW, kVAh, kVA, PF, Frequency, Voltage, Current, dmd, THD etc. Energy is measured in terms of kWh, kVAh. Maximum demand current can be measured over preset periods of up to 60minutes. The requisite current input(s) are obtained via current transformers (CT). This meter can be configured to work with a wide range of CTs, giving the unit a wide range of operation. Configuration is password protected.

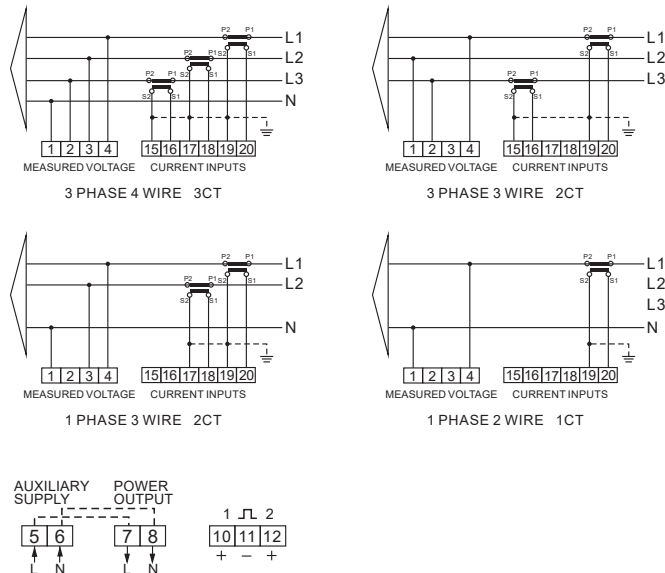
The meter was ETL approved by intertek and MID approved by SGS. Electrical characteristics

Specification Table

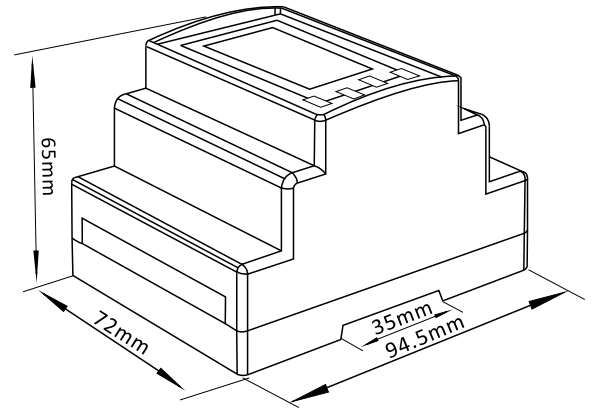
Electrical characteristics		Mechanical Characteristics	
Type of measurement	RMS including harmonics on three phase AC system (3P, 3P+N)	Weight	330g
Measurement accuracy		IP Degree of Protection (IEC 60529)	IP51 (when installed in an IP51 enclosure)
- Active Energy	IEC 62053-21 Class 1	Dimensions (WxHxD)	72x94.5x65mm
- Reactive Energy	IEC 62053-23 Class 2	Mounting	Din rail (DIN 43880)
- Frequency	± 0.2%	Material of meter case	Self-extinguishing UL 94 V-0
- Current	± 0.5%	Mechanical environment	M1
- Voltage	± 0.5%		
- Power	± 0.01		
- Power Factor	± 0.01		
Data Update Rate	1 second nominal		
Input-Voltage			
- VT Primary	30 ~ 500000 Vac		
- Un	230 V L-N		
- Measured Voltage with Over-range	173 to 480 V AC L-L / 100 to 276 V AC L-N		
- Impedance	1MΩ		
- Frequency Range	45~65Hz		
Input- Current			
- CT Ratings			
- Primary	1~9999A		
- Secondary	1A / 5A		
- Measured current with Over-range	6A		
- Withstand	Continuous 120A for 0.5 Seconds		
- Impedance	<1MΩ		
- Frequency Range	45~65Hz		
- Burden	<0.036VA at 6A		
Auxiliary Power Supply			
- Operating Range	85~275V AC / 120~380V DC		
- Power Consumption	< 7VA/3.5W		
- Frequency	45 to 65 Hz		
Max. reading	9999999.9 kWh/ kVAh		
Environmental Characteristics		Safety	
Operating Temperature	-40 to 70°C	Measurement Category	Per IEC61010-1 CAT III
Storage Temperature	-40 to 70°C	Current Inputs	Require external Current Transformer for Insulation
Humidity Rating	<95% RH at 50 °C (non-condensing)	Over voltage Category	CAT III
Pollution Degree	2	Dielectric Withstand	As per IEC 61010-1 Double Insulated front panel display
Altitude	2000m	Protective Class	II
Vibration	10Hz to 50Hz, IEC 60068-2-6		
Communications			
Interface standard and protocol	LoRaWAN Specification 1.0.2		
Frequency	EU868/AS923/AU915/ US902/CN470/CN433		
LoRaWAN Classes	Class C		
Auto-upload	Max. 30 parameters		
Auto-upload Interval	Configurable		
Activation Way	OTAA or ABP		
Output Power	13dBm in transmission		
Coding Format	ASCII		
Communication Distance	1500M in an open area		

Please contact our Sales team at sales@eastroneurope.com or reach out to our technical experts at technical@eastroneurope.com Alternatively, you can call us at (+44) 0203 758 3494.

Wiring Configuration



Dimension Drawing



Conformity References

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

Low Voltage Directive: EN61010-1-2010 & EN61010-2-30-2010

MID DIRECTIVE: 2014/32/EU