



- 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/ Of line 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.)



SDM 630 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(1 p 2 w) , single phase three wire(1 p 3 w), three phase three wire(3 p 3 w,) and three phase four wire(3p4w) supplies, including kWh, kVAh, kW, 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.

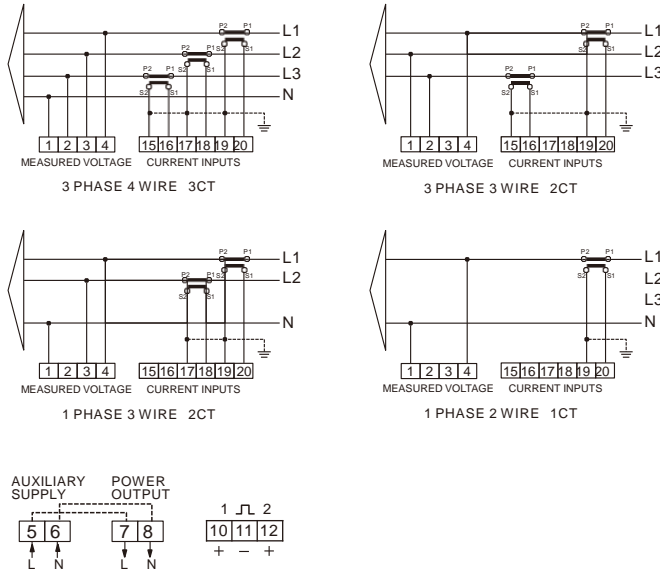
The meter was ETL approved by intertek and MID approved by SGS.

Specification table

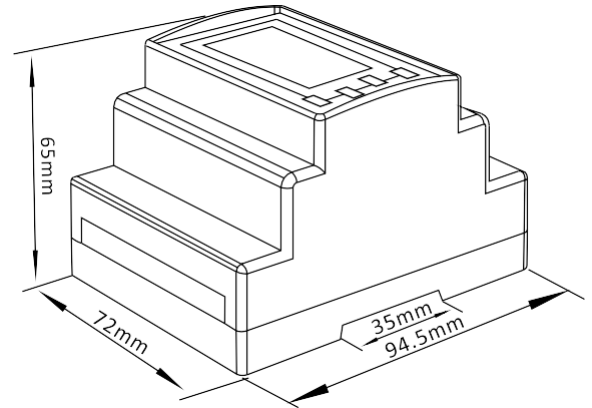
Electrical characteristics		Mechanical Characteristics	
Type of measurement	RMS including harmonics on three phase AC system (3P, 3P+N)	Weight	330g
Measurement accuracy		IP Degree of Protection (IEC 60529)	IP51 (indoor)
- Active Energy	IEC 62053-21 Class 1	Dimensions (WxHxD)	72x94.5x65mm
- Reactive Energy	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	Environmental Characteristics	
- Power Factor	± 0.01	Operating Temperature	-25 to 55 °C
Data Update Rate	1 second nominal	Storage Temperature	-40 to 70 °C
Input-Voltage		Humidity Rating	<95% RH at 50 °C (non-condensing)
- VT Primary	30 - 500000 Vac	Pollution Degree	2
- Un	230 V L-N	Altitude	2000m
- Measured Voltage with Over-range	173 to 480 V AC L-L / 100 to 276 V AC L-N	Vibration	10Hz to 50Hz, IEC 60068-2-6
- Impedance	1MΩ	Safety	
- Frequency Range	45-65Hz	Measurement Category	Per IEC61010-1 CAT III
Input- Current		Current Inputs	Require external Current Transformer for Insulation
- CT Ratings		Over voltage Category	CAT III
- Primary	1-9999A	Dielectric Withstand	As per IEC 61010-1 Double Insulated front panel display
- Secondary	1A / 5A	Protective Class	II
- Measured current with Over-range	6A	Communications	
- Withstand	Continuous 120A for 0.5 Seconds	Interface standard and protocol	LoRaWAN Specification 1.0.2
- Impedance	<1MΩ	Frequency	EU868 / AS923 / AU915 / US902 / CN470 / CN433
- Frequency Range	45-65Hz	LoRaWAN Classes	Class C
- Burden	<0.036VA at 6A	Auto-upload	Max. 30 parameters
Auxiliary Power Supply		Auto-upload Interval	Configurable
- Operating Range	85-275V AC / 120-380V DC	Activation Way	OTAA or ABP
- Power Consumption	< 7VA / 3.5W	Output Power	13dBm in transmission
- Frequency	45 to 65 Hz	Coding Format	ASCII
Max. reading	9999999.9 kWh / kVAh	Communication Distance	1500M in an open area



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