

- 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.)



SDM630MCT-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, 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.

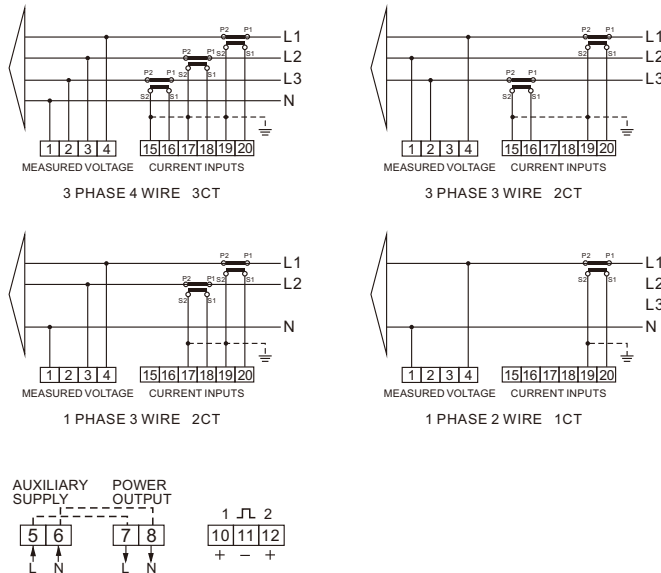
The requisite current input(s) are obtained via current transformers (CT). This meter can be configured to work with a wide range of CTs, giving the unit a wide range of operation. Configuration is password protected.

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

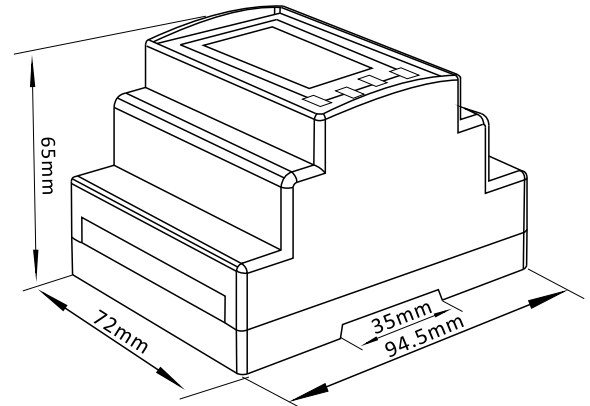
## Specification table

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

## 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