SDM630-TCP

Three Phase Multifunctional Energy Meter

sifam tinsley
PRECISION INSTRUMENTATION

Datasheet

- **65A direct load**
- **Multi-parameters measurement**
- **Plug-in solution**
- **LCD with white backlit, adjustable backlit time**



SDM630-TCP is a new multi-function energy meter designed by EASTRON. The meter can work with 1p2w, 3p3w, 3p4w electricity grid. It provides all important electrical parameters: voltage, current, power, PF, THD, frequency, demand, energy etc. The meter supports max.65A direct connection, saving the cost and avoiding the trouble to connect external CTs, giving the unit a cost-effective and easy operation.

The meter SDM630-TCP is equipped with a Ethernet communication port and MODBUS-TCP protocol is adopted for remote reading and programming. The meter has a big back-lighted LCD showing data and uses 4 touch keypads in front for data checking and programming.

Specification table

Measurements	
Phase voltage	V1, V2, V3
Line voltage	V1-2, V2-3, V3-1
Current	I1, I2, I3
Active power	P1, P2, P3, P_total (total active power)
Reactive power	Q1, Q2, Q3, Q_total (total reactive power)
Apparent power	S1, S2, S3, S_Total (total apparent power)
Frequency	Hz
Power factor	PF
Active energy	Ep_imp (import active energy), Ep_exp (export active energy), Ep_total (total active energy)
Reactive energy	Eq_imp (import reactive energy), Eq_exp (export reactive energy), Eq_total (total reactive energy)
THD-I and THD-U	
Maximum demand:	MD

Setup
Ethernet setup
Demand Interval Time
Backlit time
Supply system 1p2w, 3p3w,3p4w
Reset
Password modification

Application
SDM630-TCP supports Modbus-TCP for easy integration with other I/O and SCADA system.

Technical parameters	
Voltage AC (Un)	3*230/400VAC
Voltage range	100 - 276V a.c. (not for 3p3w supplies)
Voltage between phase	173 to 480V a.c (3p supplies only)
Current input	
Basic current (Ib)	10A
Maximum current (Imax)	65A
Over current withstand	30Imax for 0.01s
Frequency	
Rated value	50/60Hz
Range	45 - 65Hz
Voltage withstand	
AC voltage withstand	4KV/1min
Impulse voltage withstand	6kV – 1.2μS waveform
Power consumption	≤ 2W/10VA
Display	LCD with white backlit
Max. reading	999999.99 kWh/kVArh

Accuracy	
Voltage	0.50%
Current	0.50%
Frequency	0.20%
Power factor	1%
Active power	1%
Reactive power	2%
Apparent power	1%
Active energy	Class1
Reactive energy	Class2

Ethernet communication	
Type	Ethernet
Protocol	Modbus-TCP
Modbus address range	1-247
IP	192.168.1.200 (default)
Port	50200%
MASK	255.255.255.0
Gateway	192.168.1.1
DHCP	Off (default

Performance criteria	
Operation humidity	≤90%
Storage humidity	≤95%
Operating temperature	-25C°~+55C°
Storage temperature	-40C°~+70C°
International standard	IEC62053-21
Accuracy class	Class 1
Installation category	CATIII
Protection against penetration of dust and water	IP51 (indoor)

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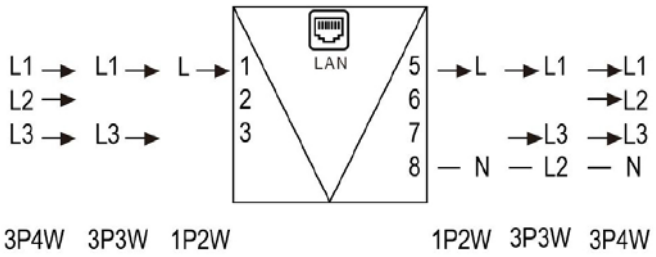
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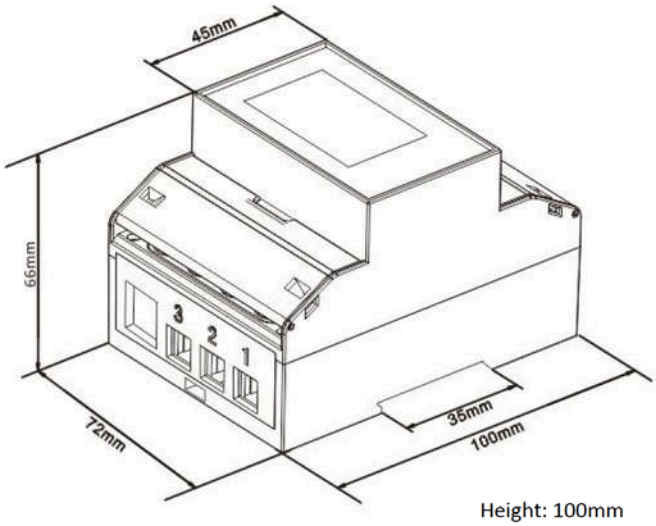
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Wiring Configuration

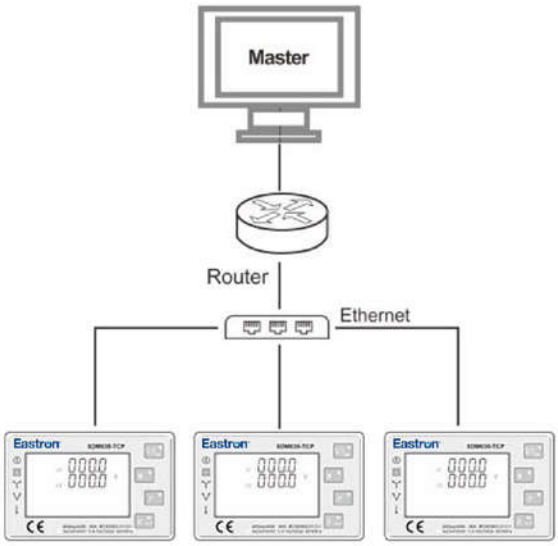


Dimension Drawing



Height: 100mm
Width: 72mm
Depth: 66mm

Communication



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

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