# SDM630-TCP

### Three Phase Multifunctional Energy Meter



### 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 costeffective 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	11, 12, 13
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
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Ethernet communication	010352
	Ethernet
Ethernet communication	
Ethernet communication Type	Ethernet
Ethernet communication Type Protocol	Ethernet Modbus-TCP
Ethernet communication Type Protocol Modbus address range	Ethernet Modbus-TCP 1-247
Ethernet communication Type Protocol Modbus address range IP	Ethernet Modbus-TCP 1-247 192.168.1.200 (default)
Ethernet communication Type Protocol Modbus address range IP Port	Ethernet Modbus-TCP 1-247 192.168.1.200 (default) 50200%
Ethernet communication Type Protocol Modbus address range IP Port MASK	Ethernet Modbus-TCP 1-247 192.168.1.200 (default) 50200% 255.255.255.0
Ethernet communication Type Protocol Modbus address range IP Port MASK Gateway	Ethernet Modbus-TCP 1-247 192.168.1.200 (default) 50200% 255.255.255.0 192.168.1.1
Ethernet communication Type Protocol Modbus address range IP Port MASK Gateway DHCP	Ethernet Modbus-TCP 1-247 192.168.1.200 (default) 50200% 255.255.255.0 192.168.1.1
Ethernet communication Type Protocol Modbus address range IP Port MASK Gateway DHCP Performance criteria Operation humidity	Ethernet Modbus-TCP 1-247 192.168.1.200 (default) 50200% 255.255.255.0 192.168.1.1 Off (default
Ethernet communication Type Protocol Modbus address range IP Port MASK Gateway DHCP Performance criteria	Ethernet Modbus-TCP 1-247 192.168.1.200 (default) 50200% 255.255.255.0 192.168.1.1 Off (default ≤90%
Ethernet communication Type Protocol Modbus address range IP Port MASK Gateway DHCP Performance criteria Operation humidity Storage humidity	Ethernet Modbus-TCP 1-247 192.168.1.200 (default) 50200% 255.255.255.0 192.168.1.1 Off (default ≤90% ≤95%
Ethernet communication Type Protocol Modbus address range IP Port MASK Gateway DHCP Performance criteria Operation humidity Storage humidity Operating temperature	Ethernet Modbus-TCP 1-247 192.168.1.200 (default) 50200% 255.255.255.0 192.168.1.1 Off (default ≤90% ≤95% -25C°~+55C°
Ethernet communication Type Protocol Modbus address range IP Port MASK Gateway DHCP Performance criteria Operation humidity Storage humidity Operating temperature Storage temperature Storage temperature	Ethernet Modbus-TCP 1-247 192.168.1.200 (default) 50200% 255.255.255.0 192.168.1.1 Off (default ≤90% ≤95% -25C°~+55C° -40C°~+70C°
Ethernet communication Type Protocol Modbus address range IP Port MASK Gateway DHCP Performance criteria Operation humidity Storage humidity Storage temperature Storage temperature International standard	Ethernet Modbus-TCP 1-247 192.168.1.200 (default) 50200% 255.255.255.0 192.168.1.1 Off (default Searchick State



# SDM630-TCP

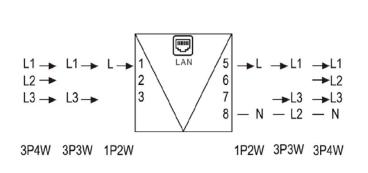
Three Phase Multifunctional Energy Meter

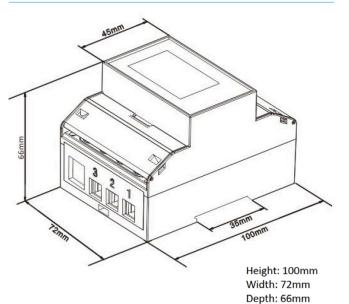


Datasheet

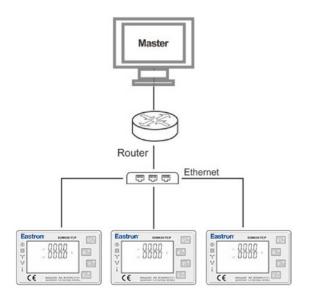
## **Wiring Configuration**

**Dimension Drawing** 





## 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