

sdc Smart Data Meter E

The compact and powerful power and energy meter

The sdc Smart Data Meter E is a compact and powerful meter for power and energy measurements in low-voltage three-phase systems.



YOUR BENEFIT

- Transparent energy consumption by means of load profile analyzes
- Compact design - high functionality
- Powerful - power measurement up to 690kW, high storage capacity, high storage dynamics
- No additional costs for software

Compact design - small dimensions

sdc Smart Data Meter E measures electrical power and energy in low-voltage three-phase systems. The measured three phase voltage is to be wired to screw-type terminals. For current measurement up to three flexible current transformers per measuring point can be connected. Up to four three-phase measuring inputs can be integrated into one device. Its small dimensions allow mounting under a contact hazard protection cover.

Easy Installation

sdc Smart Data Meter E is easily mounted by snapping onto a DIN rail. The flexible current transformers are laid around the supply wires of the measuring object; it is not necessary to disconnect the mea-

suring object from the mains. A control LED confirms the correct installation. The measurement starts immediately after switching on the supply voltage.

Powerful Data Recorder

sdc Smart Data Meter E can be equipped with a data storage up to 128GB for long-term measurements.

High dynamics

The dynamic function of the sdc Smart Data Recorder provides high storage rates of up to 10 values/second and measurement. This provides new transparency of energy consumption: detailed views of the power consumption of several connected consumers are visible at a single measuring point.

Data output at the touch of a button

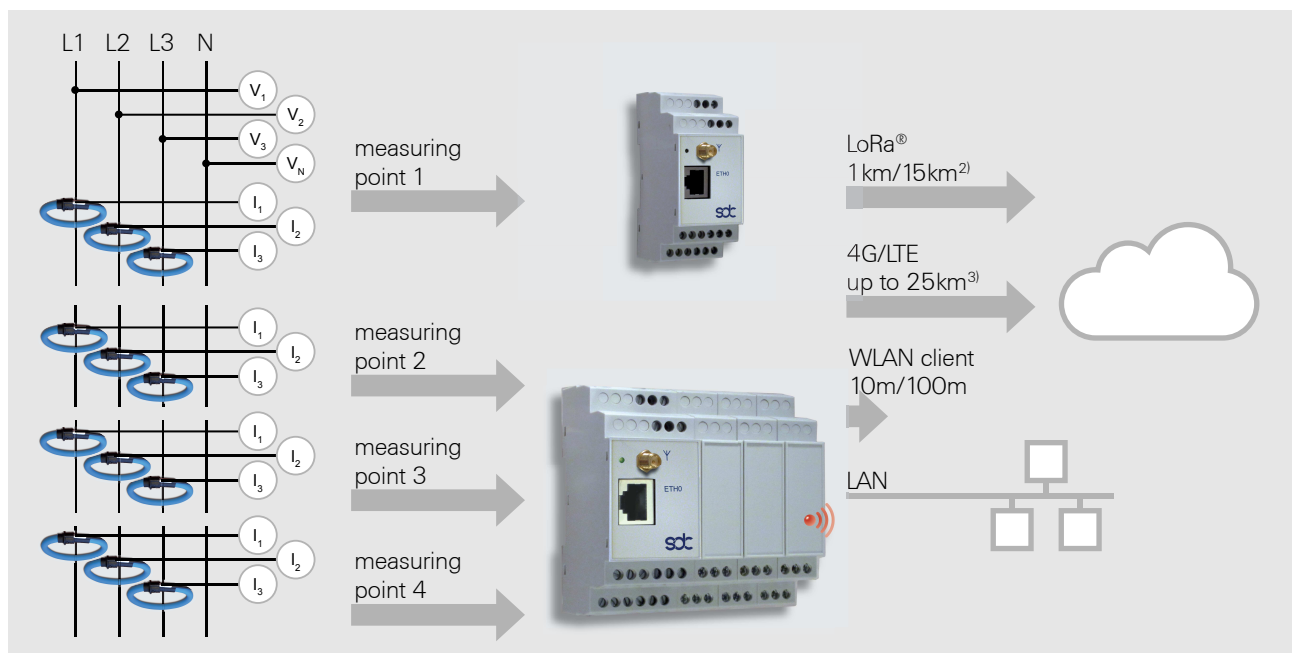
Mobile devices such as Smartphone, tablet can connect directly to the integrated Wi-Fi hotspot. All collected measurement data can be displayed in real time – at the push of a button.

High number of network interfaces

The basic version of sdc Smart Data Meter E has a LAN and WLAN interface and can also be extended with LoRa® or 4G/LTE modem.

No software costs

The parameterization and graphical evaluation can be done just using a conventional web browser on your end device.



subject to modifications, illustrations similar

2) radio range inside/outside of buildings, maximum 3) extreme far range up to the base station, maximum

Technical Characteristics sdc Smart Data Meter E	
Power range of the measurement objects	1–690 kW
Voltage measurement	3 x 400VAC (L1–L3, N), terminal connection
Current measurement	1 x three-phase measuring point for flexible current transformers up to 1000A, screw-type terminal optional: expandable to up to 4 x three-phase measuring points
Values per three-phase measuring point	phase voltages: 3 x 400VAC (L1–L3, N) phase currents: 3 x bis 1000A power factor (PF): each phase active power/energy: each phase and total reactive power: each phase and total apparent power: each phase and total multiphase energy measurement: class 0,2S, class 0,5S, class 1
Data interfaces	LAN (Ethernet RJ45) WLAN hotspot 802.11 b/g/n (intern) WLAN client 802.11 b/g/n (external antenna connection) ⁵⁾ RS485 (terminal connection) optional: LoRa® 868 MHz (external antenna connection) 4G/LTE modem: IEEE 802.15.4g (external antenna connection)
Data protocols	SMTP (email) optional: FTP, SFTP (data transfer), further on request
Web server	Http, Parameterization, visualization and remote selection of the stored ⁴⁾ measured data (CSV files) ⁴⁾ via a web browser.
Power supply	5VDC, 3A, (230VAC via switching power supply)
Dimensions (W x H x D)	ca. 35 mm x 98 mm x 65 mm optional additional width per measuring point: ca. 17,5 mm
Installation	DIN rail
Runtime system	sdc RTE/Linux
Data recorder (optional)	up to 128 GB of onboard memory available data storage format: CSV file
Dynamic function (optional)	adjustable data storage rate up to 10 values/second and measurement

Accessories

Switching power supply	230VAC / 5VDC, 3A, (dimensions W x H x D app. 25 mm x 93 mm x 56 mm)
Flexible current transformers up to 1000A	measuring range: bis 1000A/AC frequency: 20-5000Hz scope: app. 185 mm diameter: app. 80 mm cable length: app. 3 m

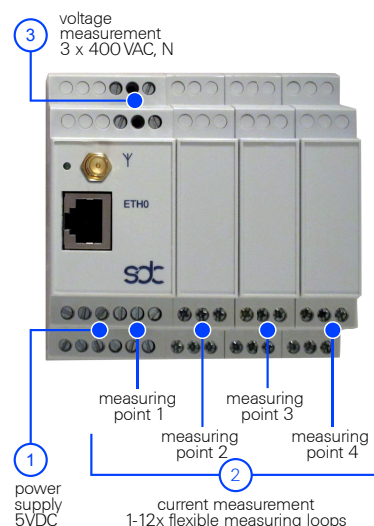
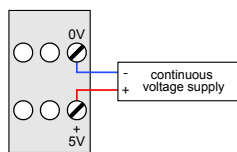


Fig. 1

Order code	
sdc Smart Data Meter E	
ME10 X - X - X - X	
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid blue; padding: 2px 5px;">A</div> <div style="border: 1px solid blue; padding: 2px 5px;">B</div> <div style="border: 1px solid blue; padding: 2px 5px;">C</div> <div style="border: 1px solid blue; padding: 2px 5px;">D</div> </div>	
A	Number of three-phase current measuring points integrated in one device 1: 1 2: 2 3: 3 4: 4
B	Data recorder 0: none 1: data recorder 8GB 2: data recorder 128GB 3: data recorder 8GB dynamic 4: data recorder 128GB dynamic
C	Data interfaces 0: LAN, WLAN-Hotspot (internal), RS485 in addition 1: WLAN client (external) 2: LoRa® 3: 4G/LTE modem
D	Data protocols 0: SMTP (email), Standard http in addition 1: FTP, SFTP X: specific on request

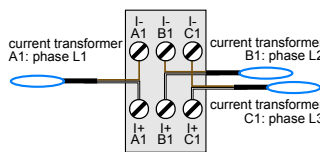
Power supply (Fig. 1/1)

+ 5V 0V	connection of the power supply 5VDC, 3A
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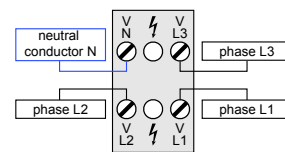
Current measurement (Fig. 1/2)

3 inputs for flexible current transformers (CT) per three-phase measuring point	
I- / I+ A1–4	CT phase 1
I- / I+ B1–4	CT phase 2
I- / I+ C1–4	CT phase 3



Voltage measurement (Abb. 1/3)

3 inputs 400 VAC, 1 input neutral conductor	
L 1	400VAC phase 1
L 2	400VAC phase 2
L 3	400VAC phase 3
N	neutral conductor



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4) prerequisite: option data recorder 5) with option LoRa® only for parameterization, as antenna connection is used for LoRa®

Product Line
sdc Smart Data Systems 2020



sdc Smart Data Communication GmbH

Blütenfeldplatz 8
D-76532 Baden-Baden
Germany

Phone: +49 (0) 7221 / 376 93-00

Email: info@smart-data-communication.com

Internet: www.smart-data-communication.com

