



/ COM-EMETER-A-20 / COM-EMETER-B-20



SMA Commercial Energy Meter

Universal Data Recording for Energy Measurements

/ Solution for single- and three-phase installations

powered by
ennexOS

Simple

- Quick plug and play installation
- Pre-assembled current transformers in the scope of delivery

Flexible

- Use in single- or three-phase installations
- Space-saving DIN rail mounting
- Available in versions for the measurement of up to 200 A and 600 A

Powerful

- Fast three-phase, bidirectional reading for effective energy management
- Perfect for the use in SMA Commercial systems with and without battery storage systems

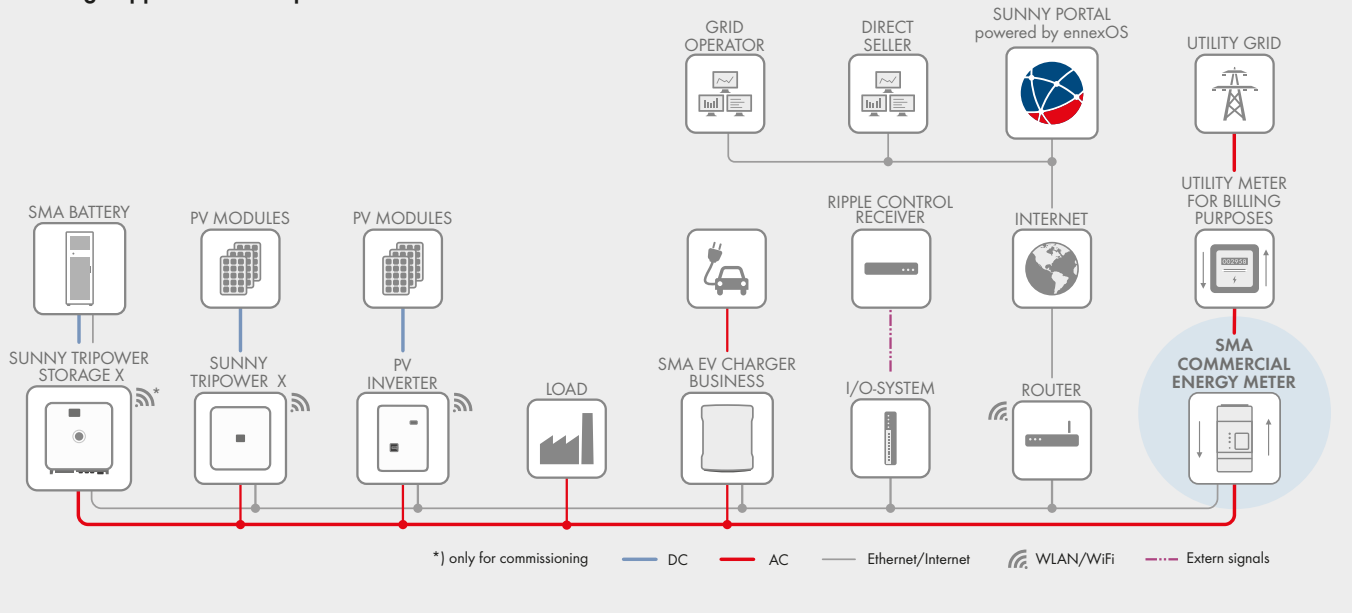
Application

- Control at the point of interconnection
- Bidirectional energy monitoring
- Integration of external loads for monitoring
- Connection to third-party inverter for energy and power monitoring

The SMA Commercial Energy Meter calculates electrical measured values and sends these through Ethernet into the local network. This allows for precise and frequent communication of data regarding grid feed-in, grid-supplied power, or PV generation from other PV inverters to SMA systems.

The SMA Commercial Energy Meter offers single- and three-phase solutions with measurements via current transformers for various customer needs in the commercial sector. The device can measure PV generation and function as a bidirectional grid-supply meter. It integrates seamlessly into the SMA Commercial Solution, providing an optimally coordinated configuration that maximizes power and stability. The measured values enhance the energy management system, contributing to increased self-consumption and reduced energy costs.

Storage application example



| Technical Data | SMA Commercial Energy Meter 600 A | SMA Commercial Energy Meter 200 A |
|---|---|-----------------------------------|
| Connection Area | | |
| Power consumption Pmax | 2 W | |
| Voltage inputs | 4 (L1, L2, L3, N) | |
| Voltage supply | from voltage input L1 | |
| Cable protection | 16 A type B | |
| Measurement range | 85 V to 250 V AC | |
| Frequency | 50 Hz / 60 Hz ± 5% | |
| Connection type | Connector with push-in is included | |
| Connection capacity | 0.20 mm ² to 2.50 | |
| Number of current transformers in the scope of delivery, calibrated to type | 3 x 600 A | 3 x 200 A |
| Measuring accuracy (full-scale value) | | |
| Phase current | 1.5% | |
| voltage | 0.5% | |
| Total active power | 2.0% | |
| Total reactive power | 2.0% | |
| Total active energy | 2.0% | |
| Power factor | 2.0% | |
| Frequency | 0.1% | |
| General Data | | |
| Dimensions (W / H / D) | 35 mm / 88 mm / 65 mm | |
| Weight | < 200 g | |
| Rail mounting in the switch or meter cabinet | ● | |
| Ambient temperature in operation | -25 °C to +55 °C | |
| Ambient temperature during transport/storage | -25 °C to +70 °C | |
| Dimensions of current transformer (W / H / T) | 57.5 mm / 85.2 mm / 41.4 mm | |
| Weight of current transformer | 470 g | 250 g |
| Diameter opening current transformer enclosure opening | 36 mm | 24 mm |
| Total weight | 1600 g | 1000 g |
| Cable length to the current transformer | 2 m | |
| Standard measuring interval | 200 ms | |
| Max. altitude above sea level during operation | 2000 m | |
| Protection class (according to IEC 62103) | II | |
| Degree of protection (as per IEC 60529) | IP20 | |
| Overvoltage category | CAT III | |
| Data protocol | SMA Speedwire (facilitates commissioning), Modbus/TCP, Modbus Sunspec | |
| Firmware update (via SMA PC tool) | ● | |
| Warranty | 2 years | |
| Product standards | | |
| Product safety | EN 61010-1; EN 61010-2-030; EN 61010-2-201 | |
| Electromagnetic compatibility | EN 61326-1, table 2 (industry) | |
| Type designation | COM-EMETER-A-20 | COM-EMETER-B-20 |

● Standard features ○ Optional features – Not available Version: 11/2024