



/ EMETER-20 / EM-1CT63A-21 / EM-3CT63A-21



SMA Energy Meter and SMA Energy Meter CT

Universal Data Recording for Energy Measurements

/ Solution for single- and three-phase installations

powered by
ennexOS

Simple

- Quick plug and play installation

Flexible

- Use in single- or three-phase installations
- Individual usability: directly connected lines or measurements via current transformer
- Space-saving DIN rail mounting

Powerful

- Fast three-phase, bidirectional reading for effective energy management
- Optimal use in Sunny Home Manager and System Manager systems

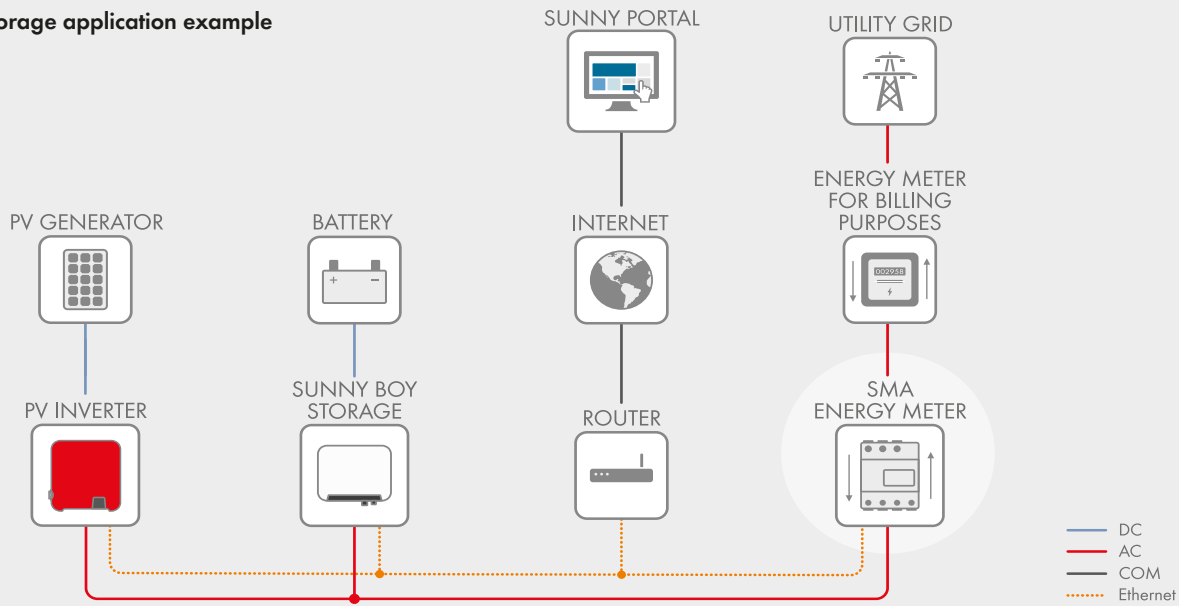
Application

- Total PV generation meter
- Integration of third-party inverters possible

Both the SMA Energy Meter and the SMA Energy Meter CT measure electrical values and transmit them via Ethernet in the local network. This allows for precise and frequent communication of data regarding grid feed-in, grid-supplied power, and PV generation from other inverters to SMA systems.

The SMA Energy Meter CT offers single- and three-phase solutions with measurements via current transformers, while the SMA Energy Meter uses directly connected lines. Both devices can measure PV generation and function as bi-directional grid-supply meters. They integrate seamlessly into the PV system, 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 Energy Meter | SMA Energy Meter CT |
|---|------------------------|--------------------------------|
| Connection range / area of application | | |
| Nominal voltage | 230 V to 400 V~ | 85 V to 250 V~ |
| Frequency range | 50 Hz / 60 Hz (±5%) | 50 Hz / 60 Hz (±5%) |
| Self-consumption, P _{MAX} | ≤ 3 W | ≤ 2 W |
| Installation site: DIN rail in the switch or meter cabinet | ● | ● |
| Mounting type: direct connection / connection current transformer | ● / ● | - / ● |
| Number of current transformers in the scope of delivery | 0 | 1 3 |
| Interfaces: Wi-Fi / Ethernet | - / ● | - / ● |
| Operation and visualization | | |
| Local UI, SMA ennexOS portal, locale devices LED | ● / ● / ● | - / ● / ● |
| Measurement range | | |
| Limiting current I _N / Line conductor | max 63 A | max 63 A |
| Extendable by additional CLASS1 current transformer | ● | - |
| Measuring accuracy | ≤ 1% | ≤ 2% |
| Measuring cycle 1000 ms / 200ms | ● / ● | ● / ● |
| General Data | | |
| Dimensions (W / H / D) | 70 mm / 88 mm / 65 mm | 35 mm / 88 mm / 65 mm |
| Individual units DIN rail | 4 | 2 |
| Weight | 0.3 kg | 0.2 kg / 0.3kg |
| Ambient temperature in operation | -25 °C to +40 °C | -25 °C to +55 °C |
| Ambient temperature during transport/storage | -25 °C to +70 °C | -25 °C to +70 °C |
| Max altitude during operation | 2000 m above sea level | 2000 m above sea level |
| Protection class (according to IEC 62103) | II | II |
| Degree of protection (as per IEC 60529) | IP20 | IP20 |
| Overvoltage category | CAT III | CAT III |
| Warranty | 2 years | 2 years |
| Certificates, approvals and manufacturer's declarations | www.SMA-Solar.com | www.SMA-Solar.com |
| Model type number | EMETER-20 | EM-1CT63A-21 EM-3CT63A-21 |

● Standard features ○ Optional features - Not available Version: 06/2024