/ 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

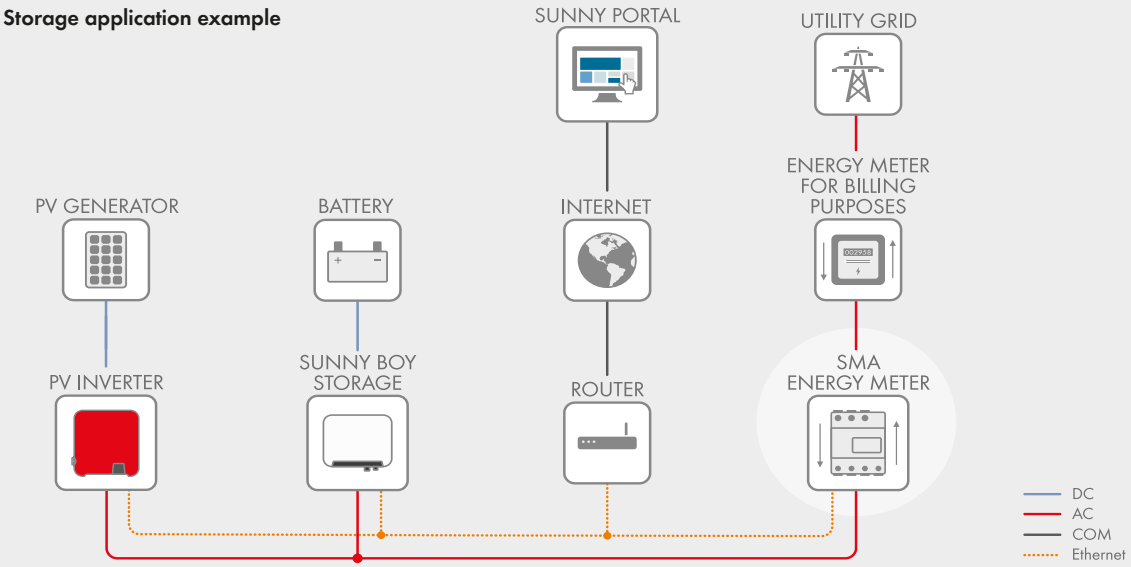
Powerful
- Fast three-phase, bidirectional reading for effective energy management
- Optimal use in Sunny Home Manager and System Manager systems

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, PMAX	≤ 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

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