SMA ENERGY METER



Easy to Use
- Quick plug-and-play installation
- Graphic visualization of current measured values in Sunny Portal and local web UI

Flexible
- Space-saving, top-hat rail mounting in household distribution thanks to compact enclosure
- Flexible use in applications > 63 A thanks to external current transformers

- Suitable for universal use regardless of existing energy meter

High Performance
- Fast three-phase, bidirectional reading for effective energy management*
- Ideal coordination with SMA devices to ensure control tasks are carried out stably

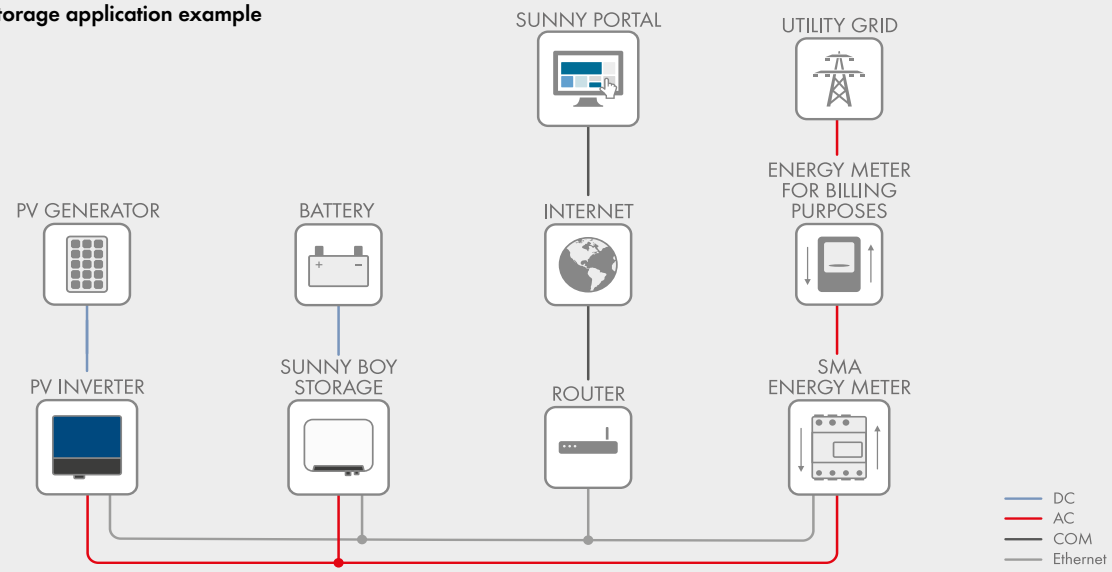
SMA ENERGY METER

Universal recording of measured values for intelligent energy management

A high-performance measurement solution for intelligent energy management in PV systems with SMA devices. The SMA Energy Meter calculates phase-exact and balanced electrical measured values and communicates these via Ethernet in the local network. In this way, all data on grid feed-in and purchased electricity as well as PV generation by other PV inverters can be communicated to SMA systems frequently and with a high level of precision.
Integrating the SMA Energy Meter establishes, in all systems, an ideally coordinated system configuration that guarantees the highest performance and stability with the best cost savings and increased self-consumption.

* Can also be used in single-phase systems.

Storage application example



Technical Data	SMA Energy Meter
Communication	
Connection to the local router	via Ethernet cable (10/100 Mbit/s, RJ45 plug)
Inputs (voltage and current)	
Nominal voltage	230 V/400 V
Frequency	50 Hz/±5%
Nominal current / limiting current per line conductor	5 A/63 A (>63 A can be connected via external current transformers)
Start-up current	< 25 mA
Connection cross-section	10 mm² to 16 mm² [1] (for 63 A fusing)
Torque for screw terminals	2.0 Nm
Ambient Conditions in Operation	
Ambient temperature	-25°C to +40°C
Storage temperature range	-25°C to +70°C
Protection class (according to IEC 62103)	II
Degree of protection (according to IEC 60529)	IP2X
Max. permissible value for relative humidity (non-condensing)	5% to 90% [2]
Elevation above MSL	0 m to 2000 m
General Data	
Dimensions (W/H/D)	70 mm/88 mm/65 mm
Top hat-rail width units	4
Weight	0.3 kg
Mounting location	Switch or meter cabinet
Mounting type	Top-hat rail mounting
Status display	2 LEDs
Self-consumption	< 3 W
Measurement accuracy, measuring cycle	1%, 1000 ms
Features	
Warranty	2 years
Certificates and permits (more available upon request)	www.SMA-Solar.com
System Compatibility (as of January 2017)	
The following devices can be used with the SMA Energy Meter[3]:	
SMA energy management	Sunny Home Manager
SMA PV inverter	Sunny Boy 1.5/2.5, Sunny Boy 3.0–5.0
SMA storage systems[4]	Sunny Boy Storage, Sunny Boy Smart Energy, Sunny Island X.XH/M
SMA communication devices	SMA Cluster Controller
Last updated: March 2017	
1) Mechanical 1.5 mm² to 25 mm² 2) 95% only on up to 30 days of the year 3) With an SMA Energy Meter at the grid connection point, typical local use and PV grid feed-in can be shown for self-consumption systems 4) SMA storage systems generally require an SMA Energy Meter or Sunny Home Manager 2.0 at the grid connection point	
Type designation	EMETER-20

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