



SMA Energy Meter-US

Maximize energy savings
by monitoring home energy
use and flows

Monitor home energy

- View energy savings by monitoring home energy use and flows.
- Realtime data via the SMA Energy app and ennexOS.SunnyPortal.com
- Track solar generation and home consumption over periods of time

Easy, flexible installation

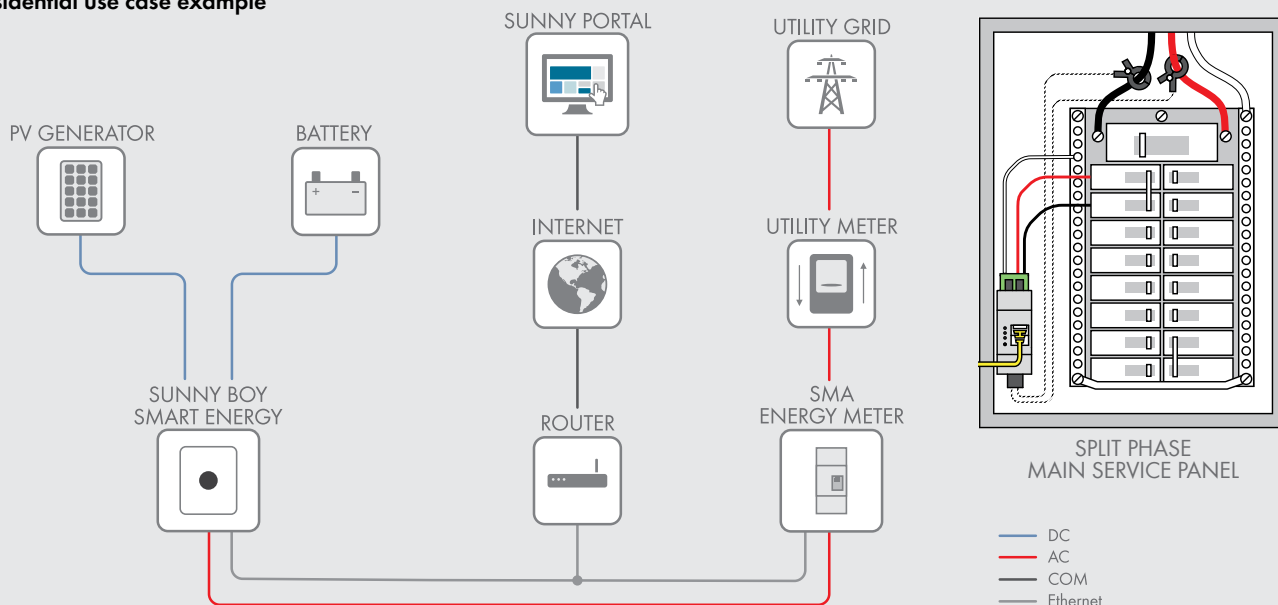
- UL2808 rated for mounting in electrical panelboards
- Space-saving design, pre-terminated wiring (included) and split-core, clamp-on current transformers (CTs)
- Flexible use in home and small commercial applications
- Fast commissioning via the SMA 360° app
- Flexible communication options, LAN or RS485

The new SMA Energy Meter empowers installers and homeowners to control energy savings by monitoring the home's energy use and flows.

Homeowners can understand their home's energy use and solar generation while learning how energy is consumed, generated, and stored. SMA's Home Energy Solutions grow with you, providing valuable information on a home's energy usage to aid in future design decisions like adding backup and battery capacity.

The SMA Energy Meter is compact, easy to install and quick to configure via the SMA 360° app. Via the SMA Energy app, homeowners can monitor energy consumption to easily track energy costs, quantify savings and view the net positive impact.

Residential use case example



Technical data	SMA Energy Meter-US
Communication	
Connection to the inverter (SBSE x.x-US-50) or local area network (LAN) router	via installer-provided Ethernet cable (#24AWG, min 300 V, shielded, 10/100 Mbit/s, RJ45 plugs) or RS485 cable (2 x 2 x 24AWG, shielded)
Data protocol	SMA Speedwire, Modbus RTU
Inputs (voltage)	
Voltage inputs	4 (L1, L2, L3, N) pre-wired (3 ft/0.9 m)
Nominal voltage	120 /240 V or 120/208 V
Frequency	50 or 60 Hz/±5%
Ambient conditions	
Operating temperature range	-13°F to +131°F (-25°C to +55°C)
Transport temperature range	-13°F to +158°F (-25°C to +70°C)
Environmental protection rating	NEMA1
Max. permissible value for relative humidity (non-condensing)	5% to 90% ²⁾
Elevation above sea level	0 to 6,562 ft (2000 m)
General data	
Applications	Split-phase (120/240V), 3-phase (120/208V), paired with Sunny Boy Smart Energy (SBSE x.x-US-50) inverter(s)
Dimensions W/H/D in inches (mm)	1.5" x 3.5" x 2.5" (70 x 88 x 65)
Weight	0.2 lb (90 g)
Mounting location	Indoors or inside 3R-rated enclosure (e.g. load center, meter/main, panelboard)
Status display / internal power consumption	3 LEDs / ≤ 2 W
Measurement accuracy, measuring interval	1%, 200 ms
Additional components	
Current transformers (2)	● (additional available in boxes of 10)
Power cable harness	●
Mounting bracket	●
RS485 connectors (2)	●
Termination resistor (1)	●
Communication cable	-
Features	
CT assembly	2 clamp CTs with 1 pre-configured connector
CT ratings	CAT IV 250V, 200A rated, 300A max, UL2808
CT cable length in inches	48"
CT inside diameter in inches	0.875"
Warranty	2 years
Certificates and permits	UL2808, CAN/CSA C22.2 No. 61010-1 and 61010-2-030, EMC FCC 47 CFR Part 15B, ICES-003 (Canada), TSCA section 6(h) compliant
● Included - Not included	
Last updated: August 2023 1) Mechanical 1.5 mm ² to 25 mm ² 2) 95% only on up to 30 days of the year	
Type designation	EMETER-US-50