SMA

HM-20

Innovative

- Energy manager with integrated measuring device
- Consumption analysis of individual loads
- Optimized battery charging in SMA storage systems

Easy to Use

- Quick plug-and-play installation
- Overview of all relevant appliances, PV generation and battery systems
- Use energy more efficiently and reduce electricity costs

Transparent

- Energy balance and load data shown in interactive diagrams
- Integrated weather and PV forecast data
- PV system monitoring via Sunny Portal and Sunny Places

Flexible

- Appliance connection via standard protocols and compatible radio-controlled sockets
- For compatible devices, such as heat pumps, electric vehicles and other household appliances, go to www.sma-solar.com
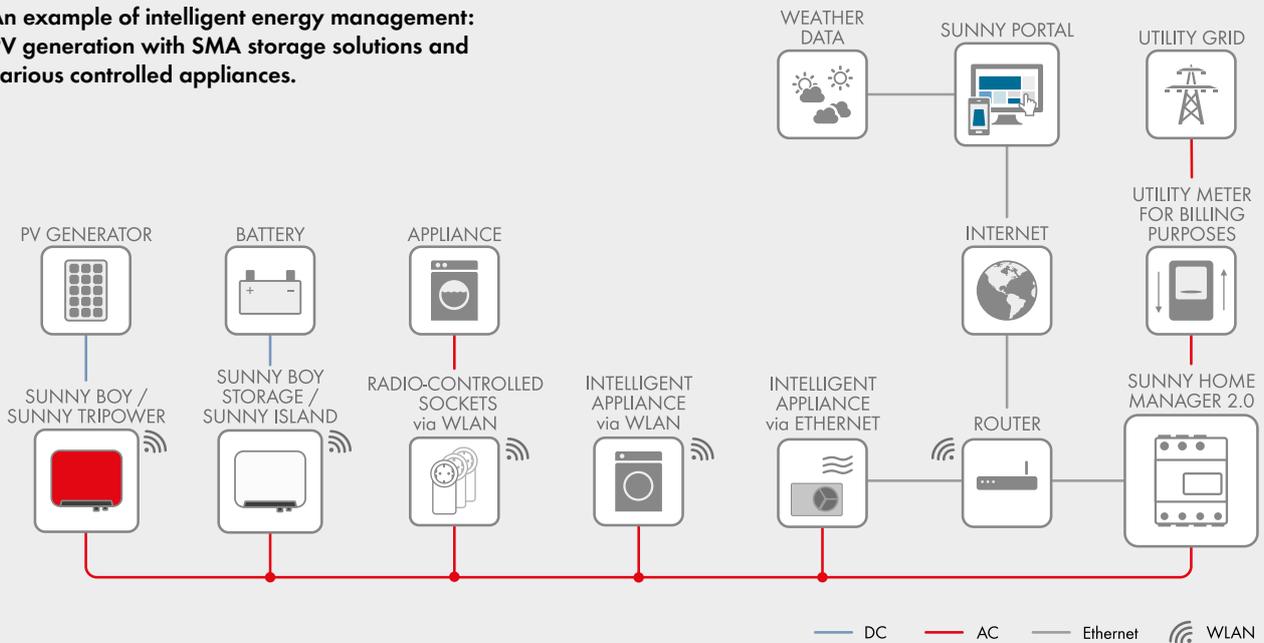
SUNNY HOME MANAGER 2.0

The control center for smart energy management

The Sunny Home Manager 2.0 is SMA's intelligent energy manager and enables the most efficient use of solar energy in the home. It optimizes PV self-consumption and significantly reduces electricity costs. To do this, it measures the power of PV generation, purchased electricity as well as grid feed-in, and gives an overview of all relevant energy flows in the household. By means of local PV generation forecasts and the measured household consumption profile, the self-learning device prompts the user with energy-related action recommendations. Operation of the controlled appliances is coordinated in a way to optimize the use of self-generated solar energy.

The path to intelligent energy management is quite easy. Simply install the Sunny Home Manager 2.0 at the grid connection point, connect it to the internet router using an Ethernet cable, then register the PV system in Sunny Portal or Sunny Places free of charge and join more than 30,000 systems already installed worldwide in benefiting from greater energy efficiency.

An example of intelligent energy management:
PV generation with SMA storage solutions and
various controlled appliances.

WEATHER DATA — SUNNY PORTAL — UTILITY GRID

UTILITY METER FOR BILLING PURPOSES

PV GENERATOR — BATTERY — APPLIANCE — INTERNET

SUNNY BOY / SUNNY TRIPOWER — SUNNY BOY STORAGE / SUNNY ISLAND — RADIO-CONTROLLED SOCKETS via WLAN — INTELLIGENT APPLIANCE via WLAN — INTELLIGENT APPLIANCE via ETHERNET — ROUTER — SUNNY HOME MANAGER 2.0

| —— DC | —— AC | —— Ethernet | 📶 WLAN |

Technical Data	Sunny Home Manager 2.0
Energy Manager	
Connection to the local router	via Ethernet cable (10/100 Mbit/s, RJ45 plug)
Connection of SMA PV inverters and battery systems	Ethernet or WLAN via local router
Connection of appliances for energy management For examples of applications for appliance connection and controls, see technical information on the Sunny Home Manager 2.0 product page at www.sma-solar.com	a. Direct data connection (EEBUS, SEMP) (e.g., intelligent heat pumps, electric car charging stations, heating elements, household appliances, etc.) b. WLAN EDIMAX SP-2101W radio-controlled socket (available via the online shop) (on/off controls for household devices of up to 12 A of power)
Integrated Measuring Device	
Measurement accuracy, measuring cycle	1%, 1000 ms
Standard application	Measurement of purchased electricity and grid feed-in at the grid connection point
Alternative application	a. Measurement of PV generation power b. Measurement inactive (L1, N, network)
Max. number of devices on the system (excluding the SMA Energy Meter)	
Total number of devices in the system	up to 24
of which devices as appliances in active energy management	up to 12
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 covered via external current transformers)
Connection cross-section	10 mm² to 16 mm² (for 63 A application)
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%
Operation altitude range	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	3 x LED
Self-consumption	< 3 W
Features	
Operation and visualization	via Sunny Portal, Sunny Places, Sunny Portal Pro
Update function	Automatic for the Sunny Home Manager and the connected SMA devices
Warranty	2 years
Certificates and approvals	www.SMA-Solar.com
Accessories	
SMA Energy Meter as complement to integrated measuring device	Precise three-phase measuring, connection via Ethernet in the local network.
Last updated: March 2017	
Type designation	HM-20

www.SMA-Solar.com

SMA Solar Technology