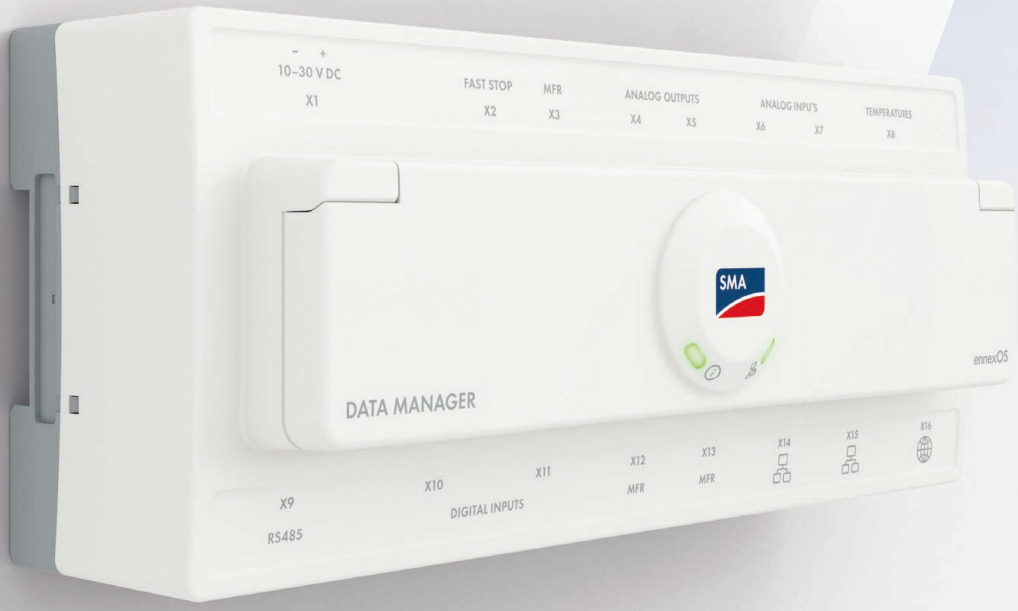
/ EDMM-20



SMA Data Manager M

Full of Ideas. Full of Potential. Full of Energy.

powered by ennexOS

Fast and easy to use
- Easy integration into new and existing systems
- Integrated inputs and outputs for digital and analog signals; no additional hardware required

Flexible and secure
- Option to connect up to 50 devices
- Enhanced cybersecurity
- Trusted platform module (TPM)
- Over-the-air updates

High performance
- More CPU power thanks to new processor
- Complies with international grid-integration requirements
- Combines energy generation, battery systems and e-mobility
- Energy management for battery systems

Reliable and practical
- Remote monitoring and parameterization possible
- Detailed analytics, error messages and reports through Sunny Portal powered by ennexOS

The SMA Data Manager M is the core element of decentralized commercial PV systems. Combined with Sunny Portal powered by ennexOS, it enables monitoring, management and grid-compliant power control at the point of interconnection.

A future-proof decision: SMA Data Manager M supports up to 50 devices and provides inputs and outputs for digital and analog signals in order to ensure the necessary flexibility in meeting a wide range of different requirements. With a maximum installed system capacity of 7.5 MVA, the SMA Data Manager M is the professional interface for electric utility companies, direct sellers, service technicians and PV system operators. Coordinated user interfaces and intuitive assistance functions simplify operation, parameterization and commissioning, making the SMA Data Manager M the preferred choice for PV application and installation.

SMA DATA MANAGER M

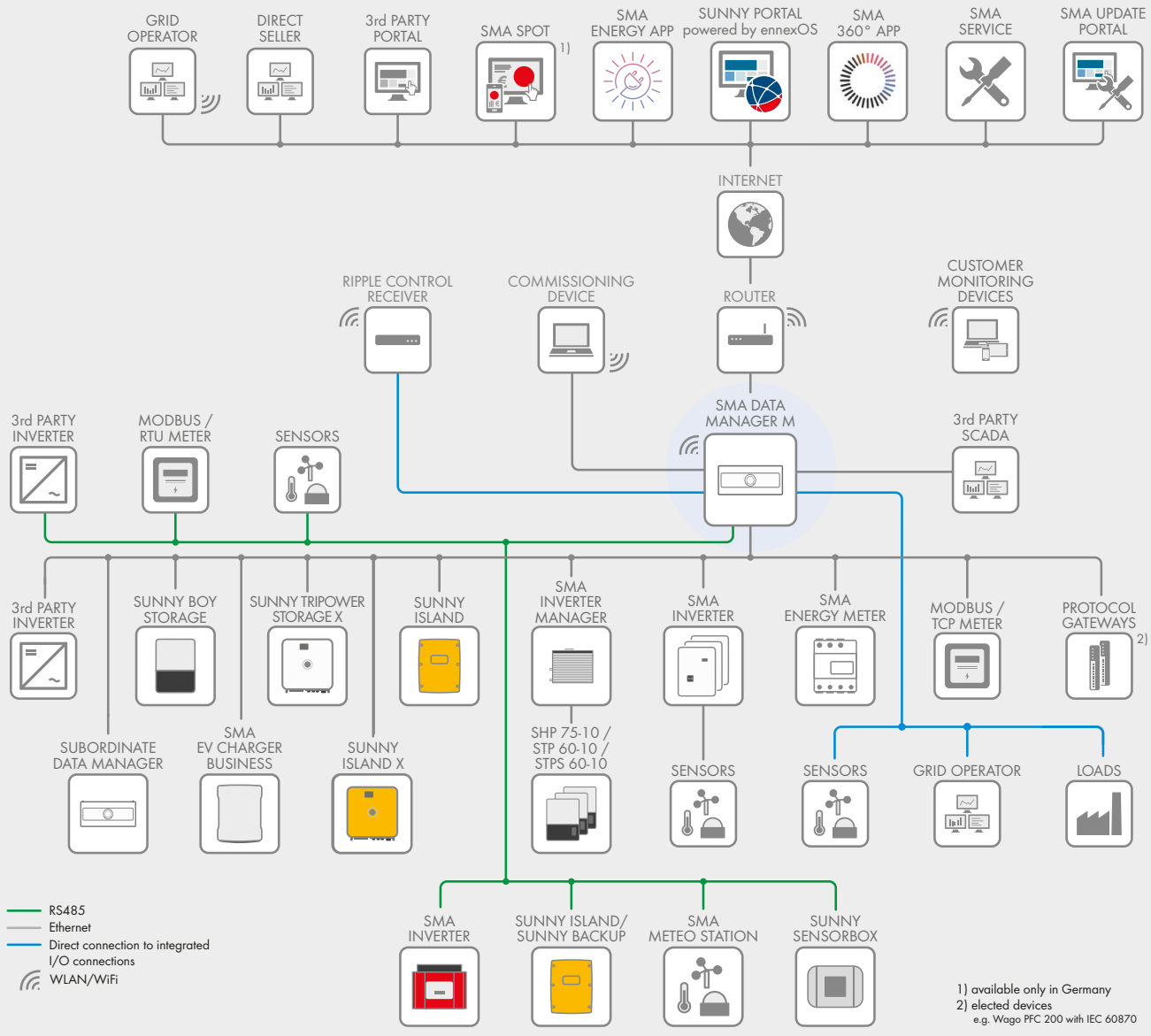
Professional monitoring and control for decentralized energy systems up to the megawatt range.

They are controlled through Sunny Portal powered by ennexOS, which enables the remote management of PV systems. You can manage multiple inverters with just one click, adjust parameters and monitor performance in real time. This saves time and minimizes costs. Centralized management for decentralized large-scale PV power plants is possible thanks to satellite-based data and cluster solutions with multiple data managers. Connectivity options include 2x Ethernet switched, 1x Ethernet, 2x RS-485 and Wi-Fi (for direct connection).
With expanded memory (e.g., for logging setpoint specifications) and remote-updates, the system is capable of responding flexibly to changing requirements.

Benefits at a glance:

- Centralized management for decentralized large-scale PV power plants thanks to satellite-based data and cluster solutions with multiple data managers
- Remote parameterization saves time and money
- Different energy management profiles for battery storage systems
- Automatic monitoring of PV components thanks to SMA Smart Connected

System diagram



Technical data	SMA DATA MANAGER M
Master data	
Total number of supported devices* (incl. an energy meter) - of which:	49
Maximum number of supported PV inverters	49
Maximum number of supported PV inverters via Modbus Sunspec (e.g., Sunny Tripower CORE2)	49
Maximum number of supported battery / hybrid inverters (depending on the system configuration)	49
Maximum number of supported charging points (EV Charger Business counts as 2 charging points)	49
Maximum number of supported energy meters (electric current and gas), generators from energy meters, I/O systems, sensors	49
Maximum nominal system power of PV inverters (nominal AC power)	A total of 7.5 MVA
Maximum nominal system power of battery inverters (nominal AC power)	
Automatic data recording for virtual generators from energy meters (PV inverter, combined heat and power plant, gas meter, diesel generator, hydroelectric power plant)	●
Connections	
Voltage supply	2-pin connection, MINI COMBICON
RS485	2x 6-pole connection, MINI COMBICON
Network (LAN)	3x RJ45 (1x internet, 2x system network) 10BaseT/100BaseT
Wi-Fi access point for commissioning and access to the user interface	●
Additional connections	10x digital in, 1x fast stop, 5x multifunction relay (MFR), 4x analog in (0 mA to 20 mA), 4x analog out (0 mA to 20 mA), 2x temperature (PT100), 1x reset button
Voltage supply	
Voltage supply	External power supply unit (available as an accessory)
Input voltage	10 V to 30 V DC
Power consumption	Typically 8 W
Ambient conditions during operation	
Environment	Restricted class 3K7 reg. IEC60721-3-3
Ambient temperature	–20 °C to +60 °C
Permissible range for relative humidity (non-condensing)	5% to 95%
Maximum operating altitude above MSL	0 m to 3,000 m (≥70 kPa)
Degree of protection according to IEC 60529	IP20 (NEMA 1)
General data	
Dimensions (W/H/D)	216 mm / 90 mm / 68 mm
Weight	372 g
Mounting location	Indoors
Mounting type	Top-hat rail mounting / wall mounting
Status display	LEDs for system and communication status
Equipment	
Warranty	2 years
Certificates and approvals (more available on request)	www.SMA-Solar.com
Accessories (optional)	
Top-hat rail power supply unit	Phoenix Contact, input: 100 V AC to 240 V AC; output: 24 V DC / 2.5 A, SMA order number: CLCON-PWRSUPPLY
Communication / protocols	
FTP push (daily / hourly)	● / ●
Wi-Fi access to customer network / to direct communication	– / ●
SMA Data2+ / SMA Data	● / ●
EtherLynx for Danfoss for TLX & FLX	●
Client: Modbus/RTU, Modbus/TCP (also Sunspec)	●
Server: Modbus/TCP	●
Commissioning	
Assistant for local commissioning of connected devices	●
Assistant for parameterization of SMA products connected via Speedwire	●
Remote parameterization of SMA devices locally and with Sunny Portal	●
Updates	
Self-update via WebUI	●
Self-update and connected Speedwire devices via SMA Update Portal	●
Grid Management Services	
Closed-loop control and open-loop control of other SMA Data Managers (EDMM-20) as subordinate devices	●
Free configuration of a grid-connection meter (measurement at the point of interconnection)	●
Direct selling via SMA SPOT (Germany)	●
Direct selling via Modbus/TCP (additional VPN router may be required)	●
Various options for open-loop and closed-loop control of active and reactive power	●
Manual specifications or specifications transferred via Modbus/TCP	●
Specifications via analog and digital inputs	●
Open-loop and closed-loop active power control (digital inputs)	●
Closed-loop active power control (P(f))	in the SMA inverter
Open-loop and closed-loop reactive power control (Q(U), Q(P))	●
Fast shutdown via the digital input	●
Setpoint storage for 18 months on the device / in the Sunny Portal	● / ●

*) see Technical Information - Compatibility of SMA Devices

Technical data	SMA DATA MANAGER M
Parameterization	
Remote parameterization of connected SMA products locally and via Sunny Portal powered by ennexOS	●
Parameter adjustment between SMA devices connected via Speedwire (local and remote)	●
Energy management	
Creating schedules (Time Scheduler) locally	●
Self-consumption control using battery systems (combined with SBS2.5, SBS3.7-6.0, SI4.4M-8.0H-13, SI X, STPS60-10, STPS X, STP-SE)	●
Peak load shaving (combined with: SBS3.7-6.0, SI X, STPS60-10, STPS X, STP-SE)	●
Optimization of battery systems with time-of-use electricity tariff (combined with: SBS3.7-6.0, STPS60-10, STP-SE)	●
Threshold-based switching of digital outputs (partially with adjustable hysteresis)	●
Monitoring EV Charger energy and power values via Modbus	●
System and device monitoring	
Comprehensive visualization of power and energy values, status and events	●
Sunny Portal powered by ennexOS in conjunction with SMA Data Manager M	
Parameterization	
Remote parameterization of selected system parameters (e.g., grid management service)	●
Remote parameterization of Data Manager and suitable connected devices	●
System and device monitoring, analysis	
Comprehensive visualization of power and energy values, status and events	●
Energy monitoring of a large number of systems in one user account	●
Energy balance visualization (different generators, grid-supplied power and grid feed-in, consumers by means of additional energy meters)	●
Manual data recording for virtual generators from energy meters (PV inverter, combined heat and power plant, gas meter, diesel generator, hydroelectric power plant)	●
Measured value evaluation of all data channels of systems and devices	●
Automatic inverter comparison with alerts	●
Satellite-based meteorological data for performance evaluation (for select countries)	●
Reporting	
Alerts in case of communication faults between Sunny Portal powered by ennexOS and the system	●
Preconfigured reports by e-mail via Sunny Portal powered by ennexOS (e.g., battery SoC)	●
Service	
SMA Smart Connected	●
Remote support through SMA Service	●
Direct selling via SMA SPOT (Germany)	●
Use of SMA 360° app	●
Use of SMA Energy app	●
SMA monitoring API	○
Type designation	EDMM-20

● Standard features ○ Optional – Not available Version: 08/2026 (Subject to changes)

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