



#### Quick and easy

- Easy integration of devices
- Centralized commissioning of all integrated components

#### Future-proof and flexible

- Flexibly expandable anytime
- Access to the energy market of the future based on ennexOS

#### Functional

- Complies with international grid-integration requirements
- Combine storage systems, energy generators and e-mobility

#### Reliable and convenient

- Remote monitoring and parameterization possible
- Detailed analytics, error messages and reporting through Sunny Portal

## SMA DATA MANAGER M LITE / SMA DATA MANAGER M

One system. Many options. For your individual needs.

In combination with the Sunny Portal powered by ennexOS, the Data Manager M enables monitoring, management and grid-compliant power control in decentralized PV systems. Thanks to flexible expansion options, the Data Manager M is already well-equipped for business models in the energy market of the future. Whether as a cost-effective Lite variant for smaller systems with up to five devices and 30 kVA, or as an expanded solution for up to 50 devices and 2.5 MVA – the Data Manager is the ideal professional system 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. Both variants are modularly expandable with many additional functions and interfaces.

# SMA DATA MANAGER M Lite

## Easy monitoring and control of PV applications, battery-storage systems and e-mobility.

The Data Manager M Lite monitors, controls and regulates up to five devices in one application with up to 30 kVA. It therefore meets all current requirements of grid operators for active and reactive power control. We are continuously developing software expansion options tailored to customer needs. Automatic firmware updates keep the device up to date with the latest safety and performance standards.

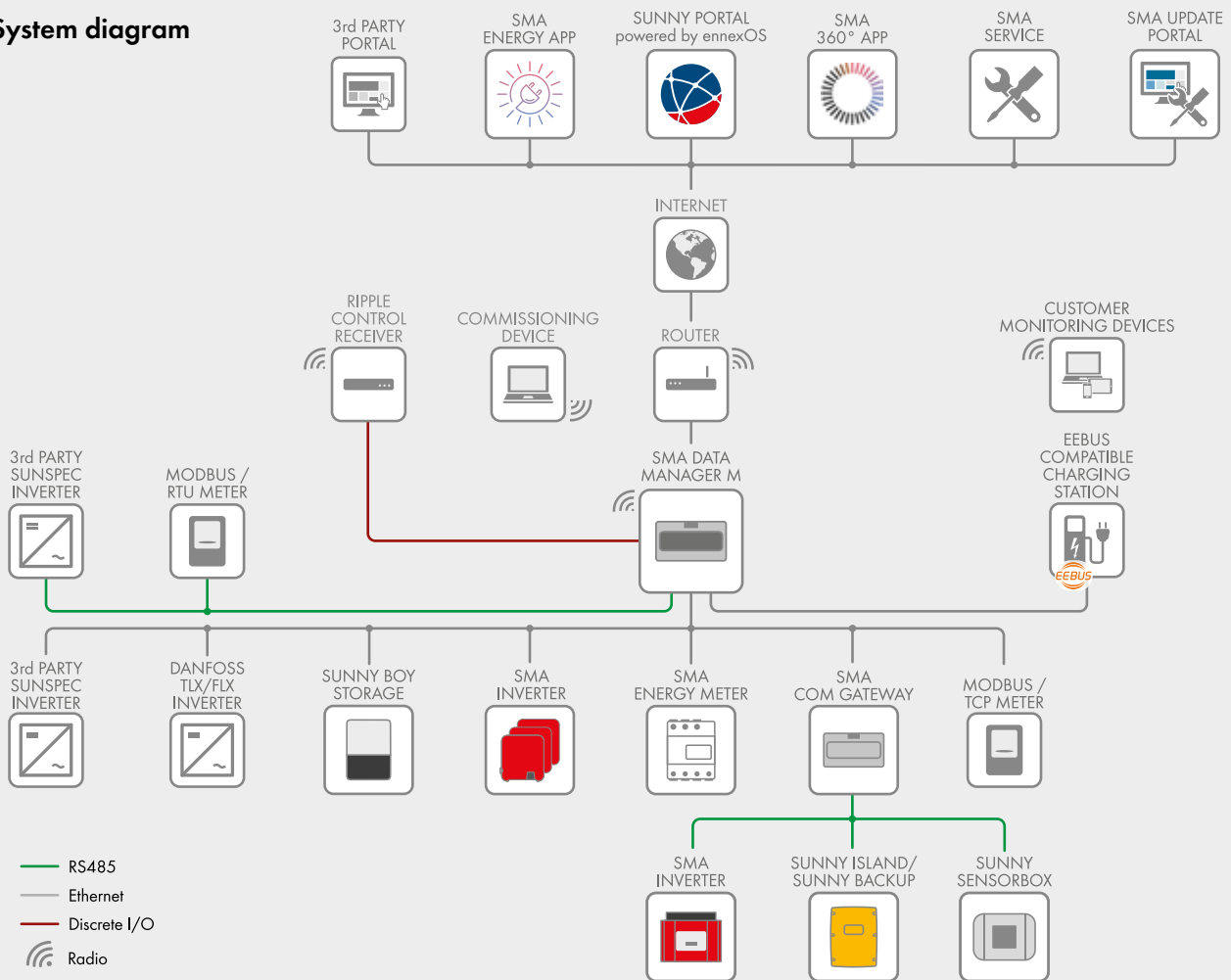
### Benefits at a glance:

- Remote parameterization saves time and money
- Event and information reports for fast error analysis
- Automatic monitoring of PV components thanks to SMA Smart Connected
- Various options for open-loop and closed-loop control of active and reactive power such as zero feed-in or Q(U)
- Compatible with the SMA 360° App (for installers) and the Energy App (for end users)
- Extension for EEBUS, e-mobility support (for example, with Audi e-tron charging system connect)
- Satellite-based performance ratio for 24 months included



With intelligent charging technology from SMA, e-mobility makes sense both environmentally and economically. The Data Manager M Lite ensures that charging electric vehicles takes priority when the PV system is producing enough solar energy or the grid current is particularly favorable. Combined with an EEBUS-compatible charging station, the SMA Data Manager M Lite automatically schedules the charging process for electric vehicles according to the individual requirements of its users. With the Energy App and the Sunny Portal for system monitoring, you can keep constant track of your energy budget and uncover additional energy saving potential.

### System diagram



# SMA DATA MANAGER M

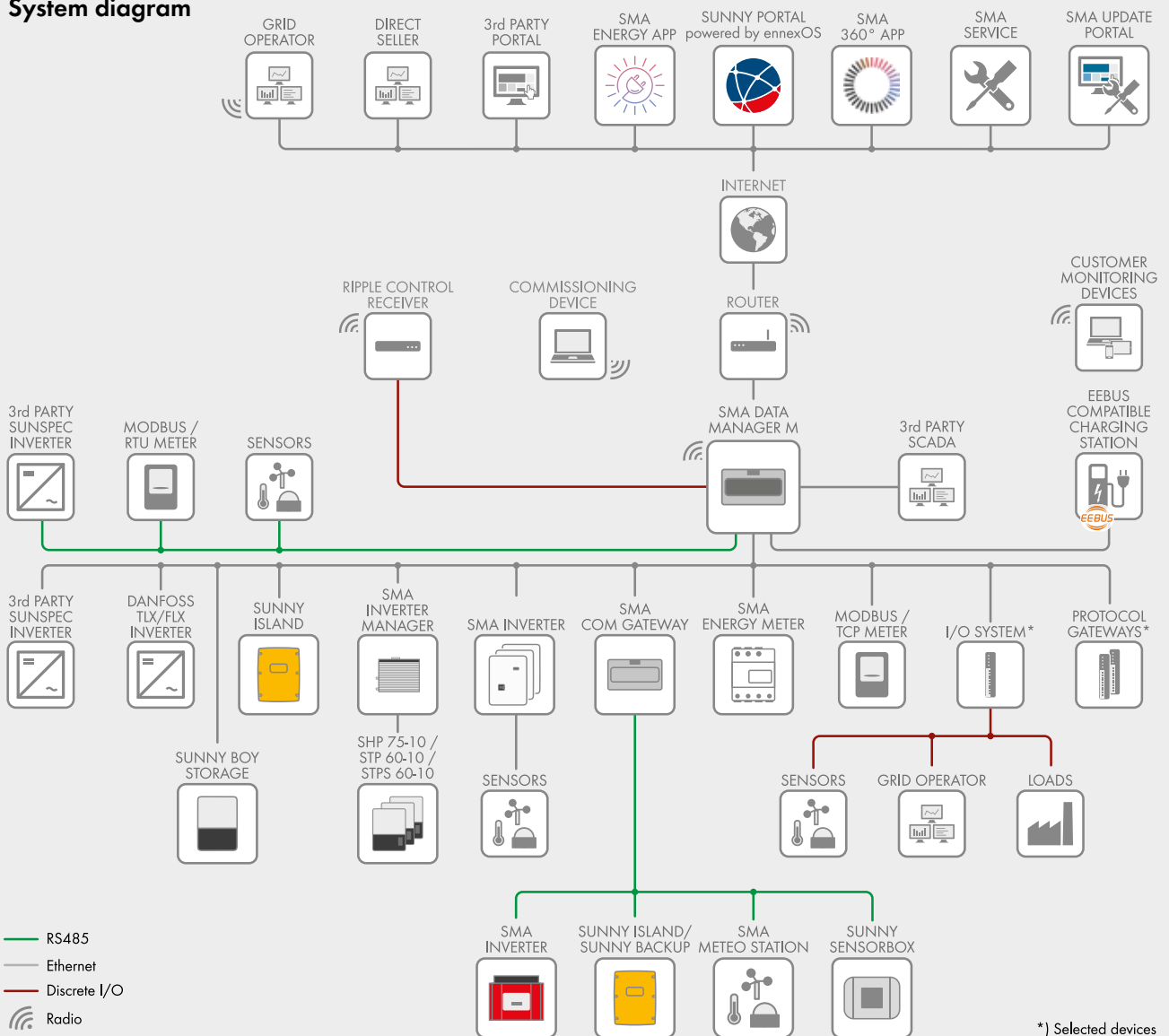
**Professional monitoring and control for decentralized energy systems up to the megawatt range.**

The Data Manager M is the perfect monitoring and control solution for decentralized large-scale PV power plants up to 2.5 MVA with up to 50 devices. Thanks to the RS485 and Ethernet interfaces as well as analog and digital input and output systems, users benefit from particularly versatile connection options. The Data Manager M is the professional system interface for electric utility companies, direct sellers, service technicians and PV system operators.

## Benefits at a glance:

- Centralized management for decentralized large-scale PV power plants thanks to satellite-based data; cluster solutions with several data managers possible (master slave application)
- Remote parameterization saves time and money
- Flexible integration options for battery-storage systems
- Direct selling with SMA SPOT
- Automatic monitoring of PV components thanks to SMA Smart Connected

## System diagram



Technical data	SMA DATA MANAGER M Lite	SMA DATA MANAGER M
<b>Master data</b>		
Total number of supported devices - of which:	5	50
Maximum number of supported PV inverters	5	50
Maximum number of supported battery inverters	1	50
Maximum number of supported energy meters (electric current and gas), generators from energy meters, I/O systems, sensors	5	50
Maximum system power PV inverters (nominal AC power)	30 kVA	2.5 MVA
Maximum system power battery inverters (nominal AC power)	30 kVA	2.5 MVA
Automatic data recording for virtual generators from energy meters (PV inverter, combined heat and power plant, gas meter, diesel generator, hydroelectric power plant)	●	●
<b>Connections</b>		
Voltage supply	2-pin connection, MINI COMBICON	
RS485	6-pin connection, MINI COMBICON	
Network (LAN)	2 x RJ45, switched, 10 BaseT/100 BaseT	
USB (for product updates)	1 x USB 2.0, type A	
WLAN access point for commissioning and access to the user interface	●	
<b>Voltage supply</b>		
Voltage supply	External power supply unit (available as an accessory)	
Input voltage	10 V to 30 V DC	
Power consumption	Typically 4 W	
<b>Ambient conditions during operation</b>		
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)	
<b>General data</b>		
Dimensions (W/H/D)	161.1 mm / 89.7 mm / 67.2 mm	
Weight	220 g	
Mounting location	Indoors	
Mounting type	Top-hat rail mounting / wall mounting	
Status display	LEDs for system and communication status	
<b>Features</b>		
Warranty	2 years	
Certificates and permits (more available upon request)	www.SMA-Solar.com	
<b>Accessories (optional)</b>		
Top-hat rail power supply unit	Input: 100 V to 240 V AC / 45 Hz to 65 Hz / Output: 24 V	
Plug-in power supply	●	
I/O system by Moxa Europe GmbH	ioLogik E1241 (4AO), SMA order number: eIO-E1241 ioLogik E1242 (4AI/4DI/4DIO), SMA order number: eIO-E1242 ioLogik E1260 (6 PT-100), SMA order number: eIO-E1260	
I/O system by WAGO Kontakttechnik GmbH & Co. KG	WAGO-I/O-SYSTEM 750 (8DI, 8DO, 4AI, 4AO, 2 PT-100), SMA order number: 115214-00.01	
<b>Communication / protocols</b>		
FTP push (daily / hourly)	● / -	● / ●
WLAN access to the customer network	-	
SMA Data2+ / SMA Data1	● / starting Q3/2020	
Etherlynx for Danfoss for TLX & FLX	●	
Client: Modbus/RTU, Modbus/TCP (also Sunspec)	●	
Server: Modbus/TCP	●	
<b>Commissioning</b>		
Assistant for local commissioning of connected devices	●	
Assistant for parameterization of SMA products connected via Speedwire	●	
Remote parameterization of SMA devices with Sunny Portal	●	
<b>Updates</b>		
Self-update and connected Speedwire devices via USB	●	
Self-update and connected Speedwire devices via SMA Update Portal	●	
<b>Grid management services</b>		
Closed-loop control and open-loop control of other SMA Data Managers (master/slave)	-	●
Free configuration of a grid-connection meter (measurement at the point of interconnection)	●	●
Direct selling via SMA SPOT (Germany)	-	●
Various options for open-loop and closed-loop control of active and reactive power	●	
Manual inputs or inputs transferred via Modbus	●	
Specifications via analog and digital inputs	via external I/O systems	
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(V))	●	
Fast shutdown via the digital input	●	

Technical data	SMA DATA MANAGER M Lite	SMA DATA MANAGER M
<b>Parameterization</b>		
Remote parameterization of connected SMA products using Sunny Portal	●	●
Parameter adjustment between SMA devices connected via Speedwire (local and remote)	●	●
<b>Energy management</b>		
Self-consumption control using battery systems (combined with SBS2.5, SBS3.7-6.0, Sunny Island)	●	●
Self-consumption control using battery systems (combined with STPS60-10)	–	●
Peak load shaving (combined with SBS3.7-6.0)	●	●
Peak load shaving (combined with STPS60-10)	–	●
Optimization of battery systems with time-of-use electricity tariff (combined with SBS3.7-6.0)	●	●
Optimization of battery systems with time-of-use electricity tariff (combined with STPS60-10)	–	●
EEBUS - e-mobility support (for example, with Audi e-tron charging system connect)	○	○
Limiting value based switching via digital outputs	●	●
<b>System and device monitoring</b>		
Comprehensive visualization of power and energy values, status and events	●	●
<b>Sunny Portal powered by ennexOS in conjunction with SMA Data Manager M</b>		
<b>Parameterization</b>		
Remote parameterization of Data Manager and suitable connected devices	●	●
<b>System and device monitoring, analysis</b>		
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)	●	●
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 devices and systems	●	●
Automatic inverter comparison with alerts	●	●
Satellite-based meteorological data for performance evaluation (for select countries)	for 24 months	●
<b>Reporting</b>		
Alerts in case of communication faults between portal and system	●	●
Preconfigured reports via e-mail	●	●
<b>Service</b>		
SMA Smart Connected	●	●
Remote support through SMA Service	●	●
Direct selling via SMA SPOT (Germany)	–	●
Use of SMA 360° app	●	●
Use of SMA Energy app (starting Q3/2020)	●	●
SMA monitoring API	○	○
Type designation	EDMM-10	EDMM-10

● Standard features ○ Optional features – Not available Status: 04/2020

