



SUNNY PORTAL
powered by ennexOS



**GOLD
AWARD
2020**



reddot design award

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 an installed inverter power of 2.5 MVA in closed-loop control mode or 7.5 MVA in open-loop control mode or monitoring mode only – 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.

| Technical data | SMA DATA MANAGER M Lite | SMA DATA MANAGER M |
|---|---|---|
| Master data | | |
| Total number of supported devices - of which: | | |
| Maximum number of supported PV inverters | 5 | 50 |
| Maximum number of supported PV inverters via Modbus Sunspec (e.g., SMA CORE2) | 5 | 20 |
| 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 (Closed-loop control) 7.5 MVA (Open-loop control or only monitoring) |
| Maximum system power 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 | 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 | | |
| Voltage supply | | |
| Voltage supply | External power supply unit (available as an accessory) | |
| Input voltage | 10 V to 30 V DC | |
| Power consumption | Typically 4 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) | 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 | |
| Features | | |
| Warranty | 2 years | |
| Certificates and permits (more available upon request) | www.SMA-Solar.com | |
| Accessories (optional) | | |
| 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 | ilogik E1214 (6DI/6 relay outputs), SMA order number: 124179-00.01 ilogik E1241 (4AO), SMA order number: eIO-E1241 ilogik E1242 (4AI/4DI/4DIO), SMA order number: eIO-E1242 ilogik 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 | |
| Communication / protocols | | |
| FTP push (daily / hourly) | • / - | • / • |
| WLAN access to the customer network | - | - |
| 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 with Sunny Portal | | • |
| Updates | | |
| Self-update and connected Speedwire devices via USB | | • |
| 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 (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 |
|--|-------------------------|--------------------|
| Parameterization | | |
| Remote parameterization of connected SMA products using Sunny Portal | ● | |
| Parameter adjustment between SMA devices connected via Speedwire (local and remote) | ● | |
| Energy management | | |
| 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 of digital outputs (additional hardware required) | ● | ● |
| 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 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) | ● | |
| 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 | ● |
| Reporting | | |
| Alerts in case of communication faults between portal and system | ● | |
| Preconfigured reports via e-mail | ● | |
| 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 (starting Q3/2020) | ● | |
| SMA monitoring API | ○ | |
| Type designation | EDMM-10.A | EDMM-10 |

● Standard features ○ Optional features – Not available Status: 10/2021