

SUNNY TRIPOWER

Higher yields for private homes or small shops — intelligent solar power generation



Sunny Tripower



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The new **Sunny Tripower** ensures maximum energy yields for private homes or small shops. This inverter combines the integrated Service SMA Smart Connected service and intelligent technology for all ambient requirements. Thanks to its extremely light design, the device can be installed quickly and easily. The **Sunny Tripower** can be commissioned quickly via smartphone or tablet thanks to its integrated web interface. Current communication standards make the inverter future-proof, meaning intelligent energy management solutions as well as SMA storage solutions can be flexibly added anytime.

Compact

- One-person installation due to low weight.
- Compact design means minimum space requirements

Easy to use

- 100% plug and play installation
- Free online monitoring via Sunny Places
- Automated service thanks to SMA Smart Connected

High yields

- Use of surplus energy through dynamic active power limitation
- Yield increase without installation effort due to integrated shade management SMA ShadeFix

Combinable

- Intelligent energy management and storage solutions can be added anytime

SMA SMART CONNECTED

The integrated service for ease and comfort

SMA Smart Connected* is free monitoring of an inverter via the SMA Sunny Portal. If an inverter fails, SMA proactively informs the PV system owner and the installer. This saves valuable working time and costs.

With SMA Smart Connected, the installer benefits from rapid diagnoses by SMA. They can thus quickly rectify the fault and score points with the customer thanks to the additional, attractive services.

ACTIVATION OF SMA SMART CONNECTED

During registration of the system in the Sunny Portal, the installer activates SMA Smart Connected and benefits from automatic inverter monitoring by SMA.

AUTOMATIC INVERTER MONITORING

SMA takes on the job of inverter monitoring with SMA Smart Connected. SMA automatically checks the individual inverters for anomalies around the clock during operation. Every customer thus benefits from SMA's many years of experience.

REPLACEMENT SERVICE

If a replacement device is necessary, SMA automatically supplies a new inverter within one to three days of the fault diagnosis. The installer can contact the PV system operator of their own accord and replace the inverter.

PROACTIVE COMMUNICATION IN THE EVENT OF FAULTS

After a fault has been diagnosed and analyzed, SMA informs the installer and end customer immediately by e-mail. Everyone is thus optimally prepared for the troubleshooting process. This minimizes downtime and saves time and money. Regular power reports also provide valuable information about the overall system.

PERFORMANCE SERVICE

The PV system operator can claim compensation from SMA if the replacement inverter is not delivered within three days.

STP3.0 - STP6.0 SPECIFICATIONS

| | STP3.0 | STP4.0 | STP5.0 | STP6.0 |
|---|---|--------------|--------------|--------------|
| Input (DC) | | | | |
| Max. PV Array | 6000 Wp | 8000 Wp | 9000 Wp | 9000 Wp |
| Max. Input voltage | 850 V | 850 V | 850 V | 850 V |
| MPP Voltage range | 140 to 800 V | 175 to 800 V | 215 to 800 V | 260 to 800 V |
| Rated input voltage | 580 V | | | |
| Min. Input voltage / initial input voltage | 125 / 150 V | | | |
| Max. input Current input A / input B | 12 A / 12 A | | | |
| Max. DC short-circuit current input A / input B | 18 A / 18 A | | | |
| Number of independent MPP inputs / string per MPP input | 2/ A: 1: B: 1 | | | |
| Output (AC) | | | | |
| Rated power (at 230 V 50 Hz) | 3000 W | 4000 W | 5000 W | 6000 W |
| Max. apparent Power CA | 3000 VA | 4000 VA | 5000 VA | 6000 VA |
| Nominal AC voltage | 3/N/PE: 220 / 380 V 3/N/PE: 230 / 400 V 3/N/PE: 240 / 415 V | | | |
| AC Voltage range | 180 to 280 V | | | |
| AC grid Frequency | 50 - 60 Hz (45 to 65 Hz) | | | |
| Rated grid frequency | 50 Hz / 230 V | | | |
| Max. output current | 3 x 4,5 A | 3 x 5,8 A | 3 x 7,6 A | 3 x 9,1 A |
| Power factor at rated power | 1 | | | |
| Displacement power factor, adjustable | 0,8 overexcited to 0,8 underexcited | | | |
| Feed-in phases / connection phases | 3 / 3 | | | |
| Efficiency | | | | |
| Max. Efficiency | 98,2 % | 98,2 % | 98,2 % | 98,2 % |
| European efficiency | 96,5 % | 97,1 % | 97,4 % | 97,6 % |
| Protective devices | | | | |
| Input-side disconnection point | Yes | Yes | Yes | Yes |
| Ground fault monitoring | Yes | Yes | Yes | Yes |
| Grid monitoring | Yes | Yes | Yes | Yes |
| DC reverse polarity protection | Yes | Yes | Yes | Yes |
| AC Short circuit current capability | Yes | Yes | Yes | Yes |
| All pole sensitive residual current monitoring unit | Yes | Yes | Yes | Yes |
| Protection class according IEC 60529 | I | I | I | I |
| Surge category according IEC 60664-1 | III | III | III | III |
| General data | | | | |
| Dimensions (w x h x d) | 435 x 470 x 176 mm | | | |
| Weight | 17 Kg | | | |
| Operating temperature range | -25 to 60 °C | | | |
| Noise emission, typical | 30 dB | | | |
| Self-consumption | 5.0 W | | | |
| Topology | Transformerless | | | |
| Cooling concept | Convection | | | |
| Degree of protection according IEC 60529 | IP65 | | | |
| Climatic category according IEC 60721-3-4 | 4K4H | | | |
| Max. permissible value for relative humidity | 100% (non condensing) | | | |
| Equipment | | | | |
| DC Connection | SUNCLIX | | | |
| AC Connection | AC Connector | | | |
| Display | Via Smartphone, tablet or laptop | | | |
| Interfaces: | WLAN / Ethernet / RS485 | | | |
| Communication protocols | Modbus (SMA, Sunspec), Webconnect, SMA Data, TS4-R | | | |
| Shadefix | Integrated | | | |
| Certificates and permits | AS 4777, C10/11, CE, CEI 0-21, DIN EN 62109-1/IEC 62109-1, DIN EN 62109-2/IEC 62109-2, EN 50438, G59/3, G83/2, NEN-EN 50438, ÖVE / ÖNORM E 8001-4-712, PPDS, PPC, RD 1699, SI 4777, TR 3.2.1, UTE C15-712, VDE-AR-N 4105, VDE-0126-1-1, VFR 2014, RfG compliant | | | |
| Certificates and approvals (currently being planned) | DEWA 2016, EN 62116, IEC 61727, IE-EN 50438, NBR 16149, NRS 097-2-1 | | | |

STP8.0 - STP10.0 SPECIFICATIONS

| | STP8.0 | STP10.0 |
|---|---|--------------|
| Input (DC) | | |
| Max. PV Array | 15000 Wp | 15000 Wp |
| Max. Input voltage | 1000 V | 1000 V |
| MPP Voltage range | 260 to 800 V | 320 to 800 V |
| Rated input voltage | 580 V | |
| Min. Input voltage / initial input voltage | 125 / 150 V | |
| Max. input Current input A / input B | 20 A / 12 A | |
| Max. DC short-circuit current input A / input B | 30 A / 18 A | |
| Number of independent MPP inputs / string per MPP input | 2/ A: 2: B: 1 | |
| Output (AC) | | |
| Rated power (at 230 V 50 Hz) | 8000 W | 10000 W |
| Max. apparent Power CA | 8000 VA | 10000 W |
| Nominal AC voltage | 3/N/PE: 220 / 380 V 3/N/PE: 230 / 400 V 3/N/PE: 240 / 415 V | |
| AC Voltage range | 180 to 280 V | |
| AC grid Frequency | 50 - 60 Hz (45 to 65 Hz) | |
| Rated grid frequency | 50 Hz / 230 V | |
| Max. output current | 3 x 12,1 A | 3 x 14,5 A |
| Power factor at rated power | 1 | |
| Displacement power factor, adjustable | 0,8 overexcited to 0,8 underexcited | |
| Feed-in phases / connection phases | 3 / 3 | |
| Efficiency | | |
| Max. Efficiency | 98,3 % | 98,3 % |
| European efficiency | 97,7 % | 98,0 % |
| Protective devices | | |
| Input-side disconnection point | Yes | Yes |
| Ground fault monitoring | Yes | Yes |
| Grid monitoring | Yes | Yes |
| DC reverse polarity protection | Yes | Yes |
| AC Short circuit current capability | Yes | Yes |
| All pole sensitive residual current monitoring unit | Yes | Yes |
| Protection class according IEC 60529 | I | I |
| Surge category according IEC 60664-1 | III | III |
| General data | | |
| Dimensions (w x h x d) | 460 x 497 x 176 mm | |
| Weight | 20,5 Kg | |
| Operating temperature range | -25 to 60 °C | |
| Noise emission, typical | 30 dB | |
| Self-consumption | 5.0 W | |
| Topology | Transformerless | |
| Cooling concept | Convection | |
| Degree of protection according IEC 60529 | IP65 | |
| Climatic category according IEC 60721-3-4 | 4K4H | |
| Max. permissible value for relative humidity | 100% (non condensing) | |
| Equipment | | |
| DC Connection | SUNCLIX | |
| AC Connection | AC Connector | |
| Display | Via Smartphone, tablet or laptop | |
| Interfaces: | WLAN / Ethernet / RS485 | |
| Communication protocols | Modbus (SMA, Sunspec), Webconnect, SMA Data, TS4-R | |
| Shadefix | Integrated | |
| Certificates and permits | AS 4777.2, C10/11, CE, CEI 0-21, EN 50438, G59/3-4, G83/2-1, DIN EN 62109 / IEC 62109, NEN-EN50438, ÖVE/ÖNORM E 8001-4-712 & TOR D4, PPC, PPDS, RD1699, SI4777, TR3.2.1, UTE C15-712, VDE-AR-N 4105, VDE0126-1-1, VFR 2014, RfG compliant | |
| Certificates and approvals (currently being planned) | DEWA, IEC 61727, IEC 62116, IE-EN50438, MEA, NBR16149, NT_Ley20.571, PEA, TR3.2.2 | |

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