SUNNY TRIPOWER 3.0 / 4.0 / 5.0 / 6.0
With SMA SMART CONNECTED

SMA

5Y+5Y*
OF FACTORY WARRANTY

* Terms & conditions apply

SMA ShadeFix
STRING LEVEL OPTIMIZATION

Premium monitoring service
SMA SMART CONNECTED

Compact
- One-person installation due to low weight of 17 kg
- Compact design means minimum space requirements

Easy to use
- 100% plug and play installation
- Free online monitoring via SMA Energy App
- Automated service thanks to SMA Smart Connected
- Warranty extension from 5 to 10 years – free of charge

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
- Can be expanded with SMA Power Limiter for use of a ripple control receiver

SUNNY TRIPOWER 3.0 / 4.0 / 5.0 / 6.0

Higher yields for private homes — intelligent solar power generation

The new Sunny Tripower 3.0–6.0 ensures maximum energy yields for private homes. 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. For specific requirements on the roof, SMA ShadeFix maximizes the PV system's yield. Current communication standards make the inverter future-proof, meaning intelligent energy management solutions as well as SMA storage solutions can be flexibly added anytime.

Technical data	Sunny Tripower 3.0	Sunny Tripower 4.0	Sunny Tripower 5.0	Sunny Tripower 6.0
Input (DC)				
Max. PV array power	6000 Wp	8000 Wp	9000 Wp	9000 Wp
Max. input voltage	850 V	850 V	850 V	850 V
MPP voltage range	140 V to 800 V	175 V to 800 V	215 V to 800 V	260 V to 800 V
Rated input voltage		580 V		
Min. input voltage / initial input voltage		125 V / 175 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 / strings 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
Rated / Max. apparent power	3000 VA / 3000 VA	4000 VA / 4000 VA	5000 VA / 5000 VA	6000 VA / 6000 VA
Rated voltage		3/N/PE; 220 V / 380 V 3/N/PE; 230 V / 400 V 3/N/PE; 240 V / 415 V		
Voltage range		180 V to 280 V		
Grid frequency / range		50 Hz / 45 Hz to 55 Hz 60 Hz / 55 Hz to 65 Hz		
Rated grid frequency / rated grid voltage		50 Hz / 230 V		
Rated / Max. output current	3 x 4.4 A / 3 x 4.6 A	3 x 5.8 A / 3 x 6.1 A	3 x 7.3 A / 3 x 7.6 A	3 x 8.7 A / 3 x 9.1 A
Power factor at rated power / Displacement power factor, adjustable		1 / 0.8 overexcited to 0.8 underexcited		
Feed-in phases / connection phases		3 / 3		
Efficiency				
Max. efficiency / European efficiency	98.2% / 96.5%	98.2% / 97.1%	98.2% / 97.4%	98.2% / 97.6%
Protective devices				
Input-side disconnection point		●		
Ground fault monitoring / grid monitoring		● / ●		
DC reverse polarity protection / AC short circuit current capability / galvanically isolated		● / ● / –		
All-pole-sensitive residual-current monitoring unit		●		
Protection class (according to IEC 61140) / surge category (according to IEC 60664-1)		I / III		
General data				
Dimensions (W / H /D)		435 mm / 470 mm / 176 mm (17.1 inches / 18.5 inches / 6.9 inches)		
Weight		17 kg (37.4 lbs)		
Operating temperature range		-25°C to +60°C (-13°F to +140°F)		
Noise emission, typical		30 dB(A)		
Self-consumption (at night)		5.0 W		
Topology / Cooling concept		Transformerless / Convection		
Degree of protection (according to IEC 60529)		IP65		
Climatic category (according to IEC 60721-3-4)		4K4H		
Max. permissible value for relative humidity (non-condensing)		100%		
Equipment				
DC connection / AC connection		SUNCLIX / AC connector		
Display via smartphone, tablet, laptop		●		
Interfaces: WLAN / Ethernet / RS485		▲ / ● / ●		
Communication protocols		Modbus (SMA, Sunspec), Webconnect, SMA Data		
Shade management: SMA ShadeFix (integrated)		●		
Warranty: 5 / 10 / 15 years		● / ●* / ○		
Certificates and permits (more available upon request)		AS4777.2, C10/11, CE, CEI 0-21, DEWA 2016, DIN EN 62109-1/IEC 62109-1, DIN EN 62109-2/IEC 62109-2, DK1/2 Typ A, EN 50549-1, EN 62116, G98-1, G99-1, IEC 61727, IE-EN 50438, NEN-EN 50438, NRS 097-2-1, PPDS, PPC, RD 1699, SI 4777.2, TOR Erzeuger Typ A, UTE C15-712, VDE-AR-N 4105, VDE-0126-1-1, VFR 2014		
Certificates and approvals (planned)		NBR 16149		
Country availability of SMA Smart Connected		AU, AT, BE, CH, DE, ES, FR, IT, LU, NL, UK		
Type designation	STP3.0-3AV-40	STP4.0-3AV-40	STP5.0-3AV-40	STP6.0-3AV-40

*) Device registration via the SMA product registration homepage (sma-service.com). The conditions of the SMA limited factory warranty apply. You can find additional information at SMA-Solar.com