

SUNNY TRIPower 3.0 / 4.0 / 5.0 / 6.0

With SMA SMART CONNECTED



STP3.0-3AV-40 / STP4.0-3AV-40 / STP5.0-3AV-40 / STP6.0-3AV-40



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 / 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, IEC 61727-1, IEC 61727-2, IEC 61727-3, IEC 61727-4, IEC 61727-5, IEC 61727-6, IEC 61727-7, IEC 61727-8, IEC 61727-9, IEC 61727-10, IEC 61727-11, IEC 61727-12, IEC 61727-13, IEC 61727-14, IEC 61727-15, IEC 61727-16, IEC 61727-17, IEC 61727-18, IEC 61727-19, IEC 61727-20, IEC 61727-21, IEC 61727-22, IEC 61727-23, IEC 61727-24, IEC 61727-25, IEC 61727-26, IEC 61727-27, IEC 61727-28, IEC 61727-29, IEC 61727-30, IEC 61727-31, IEC 61727-32, IEC 61727-33, IEC 61727-34, IEC 61727-35, IEC 61727-36, IEC 61727-37, IEC 61727-38, IEC 61727-39, IEC 61727-40, IEC 61727-41, IEC 61727-42, IEC 61727-43, IEC 61727-44, IEC 61727-45, IEC 61727-46, IEC 61727-47, IEC 61727-48, IEC 61727-49, IEC 61727-50, IEC 61727-51, IEC 61727-52, IEC 61727-53, IEC 61727-54, IEC 61727-55, IEC 61727-56, IEC 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