STP8.0-3AV-40 / STP10.0-3AV-40

Sunny Tripower

with SMA Smart Connected

8.0 / 10.0

More income for private households:
Generate solar power intelligently

SMA Smart Connected

SMA ShadeFix

Compact

- 1-person assembly thanks to its low weight of 20.5 kg
- Minimal space required thanks to compact design

Comfortable

- 100% Plug & Play installation
- Free online monitoring via SMA Energy app
- Automated service through SMA Smart Connected
- Factory warranty extension from 5 to 10 years – free of charge

Profitable

- Use of excess energy through dynamic Active power limitation
- Increased yield without assembly effort thanks to integrated Shading management SMA ShadeFix

Can be combined

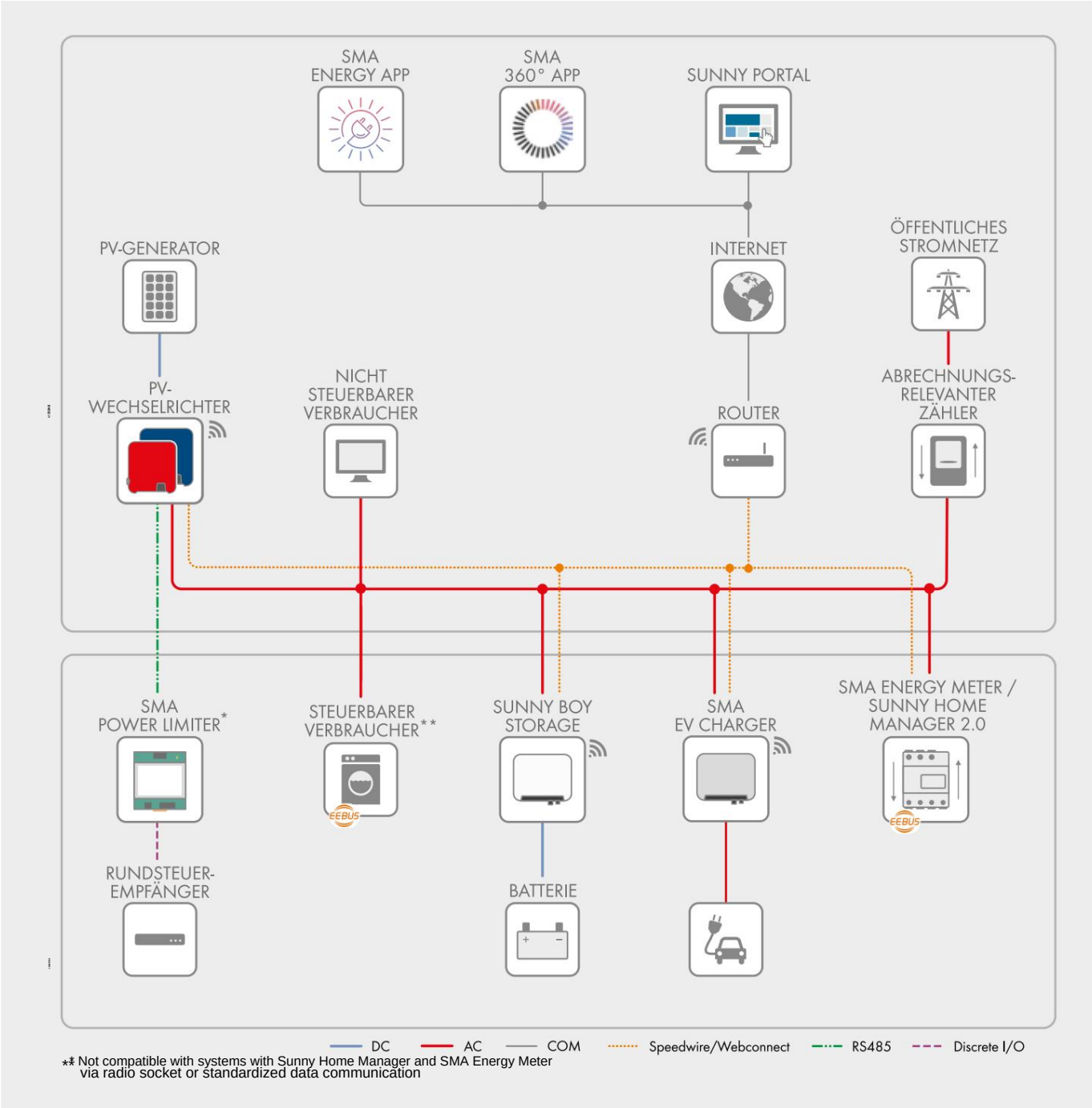
- Can be expanded at any time to include intelligent energy management and storage solutions
- Expandable with SMA Power Limiter for the use of a ripple control receiver

The new Sunny Tripower 8.0–10.0 ensures maximum solar yields for private households.

It combines the integrated SMA Smart Connected service with intelligent technology for all environmental requirements. The device is easy to install thanks to its extremely light construction

learn. The Sunny Tripower can be quickly put into operation using a smartphone or tablet using the integrated web interface.

And for special requirements on the roof, SMA ShadeFix maximizes the yield of the PV system. Current communication standards make the inverter future-proof and can be flexibly expanded at any time to include intelligent energy management and SMA storage solutions.



Functions BASIC SYSTEM

- Easy commissioning via integrated WLAN and Speedwire interface
- Maximum transparency through visualization Sunny Portal / SMA Energy App
- Investment security through SMA Smart Connected
- Modbus as a third-party interface

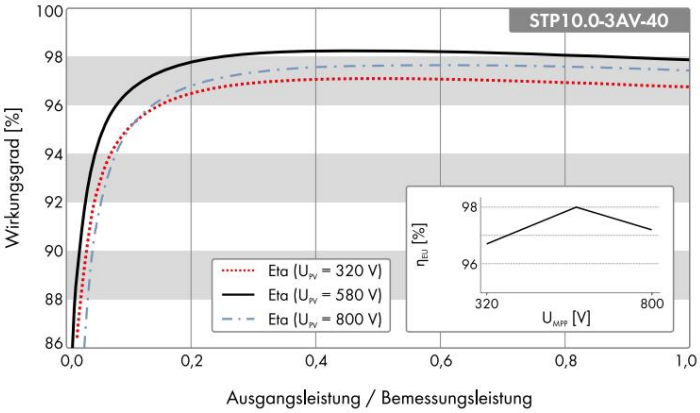
Features ADVANCED SYSTEM

- Functions of the basic system
- Reducing grid consumption and increasing self-consumption Use of temporarily stored solar energy
- Maximum energy utilization through forecast-based charging
- Increased self-consumption through intelligent consumer control
- Easy integration of ripple control receivers via SMA Power Limiter

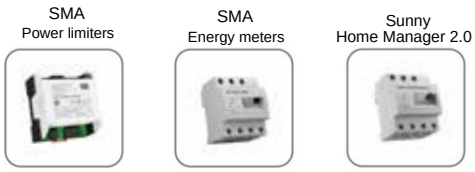
With SMA Energy Meter

- Maximum system utilization through dynamic limitation of feed into the grid between 0% and 100%
- Visualization of energy consumption

Efficiency curve



Accessories optional



Technical data	Sunny Tripower 8.0	Sunny Tripower 10.0
Input (DC)		
Max. generator power	15000 Wp	15000 Wp
Max. input voltage MPP	1000 B	1000 B
voltage range Rated	260V to 800V	320V to 800V
input voltage Min. input voltage /	580 B	
starting input voltage Max. usable input current Input	125V/175V	
A / Input B Max. short-circuit current Input A / Input B	20A / 12A	
Number of independent MPP inputs / strings	30A / 18A	
per MPP input Output (AC)	2 / A:2; B:1	
Rated power (at 230 V, 50 Hz)	8000W	10000W
Rated apparent power / Max. apparent power	8000VA / 8000VA	10000VA / 10000VA
nominal voltage	3/N/PE; 220V/380V 3/N/PE; 230V/400V 3/N/PE; 240V/415V	
Voltage range	180V to 280V	
Mains frequency / range	50Hz / 45Hz to 55Hz 60Hz / 55Hz to 65Hz	
Rated network frequency / Rated network voltage	50Hz/230V	
Rated output current / Max. output current Power	3 x 11.6A / 3 x 12.1A 3 x 14.5A / 3 x 14.5A	
factor at rated power / Shift factor adjustable Supply phases / connection	1/0.8 overexcited to 0.8 underexcited	
phases Efficiency	3/3	
Max. efficiency / European Efficiency of	98.3% / 97.7%	98.3% / 98.0%
protective devices		
Input-side isolation point Earth	•	
fault monitoring / network monitoring DC reverse	• / •	
polarity protection / AC short-circuit strength / galvanically isolated All-	• / • / —	
current sensitive residual current monitoring unit	•	
Protection class (according to IEC 61140) / overvoltage category (according to IEC 60664-1)	I/III	
General data		
Dimensions (W / H / D)	460mm / 497mm / 176mm (18.1inch / 19.6inch / 6.9inch)	
Weight	20.5kg (45.2lb)	
Operating temperature	ÿ25 °C to +60 °C (ÿ13 °F to +140 °F)	
range Noise emission,	30dB(A)	
typical internal consumption (night)	5.0W	
Topology / cooling concept	Transformerless / convection	
Protection class (according to IEC 60529)	IP65	
Climate class (according to IEC 60721-3-4)	4K4H	
Permissible maximum value for relative humidity (non-condensing)	100%	
Furnishing		
DC connection / AC connection	SUNCLIX / AC plug	
Display via smart phone, tablet, laptop	•	
Interfaces: WLAN / Ethernet / RS485	ÿ / • / •	
Communication protocols	Modbus (SMA, Sunspec), Webconnect, SMA Data	
Shade management: SMA ShadeFix (integrated)	•	
Guarantee: 5 / 10 / 15 years	• / •* / •	
Certificates and approvals (others on 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 Type 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 generator Type A, UTE C15-712, VDE-AR-N 4105, VDE-0126-1-1, VFR 2014	
Certificates and approvals (in planning)	NBR16149	
Country availability SMA Smart Connected	AU, AT, BE, CH, DE, ES, FR, IT, LU, NL, UK	
Type designation	STP8.0-3AV-40 STP10.0-3AV-40	

• Standard equipment • Optional — Not available ÿ Depending on availability, information on nominal conditions as of: 04/2023
* when registering the device via the SMA product registration homepage (sma-service.com). The conditions of the SMA factory guarantee apply. Further information at SMA.de

Sunny Tripower 8.0/10.0

SMA ShadeFix - intelligently optimize solar yields

Proven product features and integrated software solutions ensure yield optimization over the entire system lifespan. Even in shading. The patented SMA ShadeFix inverter software optimizes solar yield in almost every situation. Additional security is provided by SMA Smart Connected inverter monitoring, which detects errors at an early stage and automatically reports them to the installer.

SMA Smart Connected - Proactive communication in the event of errors

SMA Smart Connected* is free monitoring of the inverter via SMA Sunny Portal. In the event of an inverter error, SMA proactively informs the system operator and the installer. This saves valuable working time and costs.

With SMA Smart Connected, the installer benefits from quick diagnoses from SMA. He can correct the errors quickly and score points with the customer with additional attractive services.

*) For details see document “Service Description - SMA SMART CONNECTED”