

SUNNY TRIPOWER CORE1 - STP 50-40

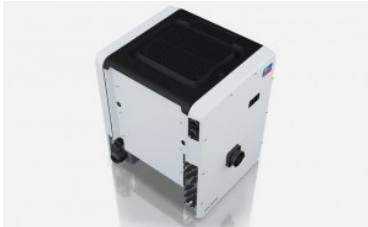
Sunny Tripower Core 1, the World's first free standing inverter, with up to 60% faster installation for commercial PV systems.



Sunny Tripower CORE1



Inversor SMA Sunny Tripower CORE1 STP50-40



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The Sunny Tripower CORE1 is the world's first free-standing string inverter for decentralized rooftop and ground-based PV systems as well as covered parking spaces.

The CORE1 is the third generation in the successful Sunny Tripower product family and is revolutionizing the world of commercial inverters with its innovative design. SMA engineers developed an inverter that combines a unique design with an innovative installation method to significantly reduce installation time and provide all target groups with a maximum return on investment.

From delivery and installation to operation, the Sunny Tripower CORE1 generates widespread savings in logistics, labor, materials and services. Commercial PV installations are now quicker and easier to complete than ever before.

Cost-effective

- Floor mounted device easy to install.
- No DC fuses required
- Integrated DC disconnect

Highly integrated

- Integrated Wi-Fi access with any mobile device
- 12 direct string inputs reduce labor and material costs
- AC/DC overvoltage protection (optional)

Fastest Installation

- Fast grid connection due to easy inverter configuration and commissioning.
- Completely accessible connection areas.

Maximum Yields

- Up to 150% DC-AC ratio.
- Six independent MPP trackers guarantee optimal energy production for every use, even in shading.

SPECIFICATIONS

Sunny Tripower CORE1

Input (CC)

Max. generator power	75000 Wp STC
Max. input voltage	1000 V
MPP voltage range	500 to 800 V
Rated input voltage	670 V
Start input voltage	150 / 188 V
Max. operating input current / per MPPT	120 A / 20 A
Max. shortcircuit current per MPPT / per string input	30 A / 30 A
Number of independent MPPT inputs / strings per MPP input	6 / 2

Output (AC)

Rated power (at 230 V, 50 Hz)	50000 W
Max. apparent AC power	50000 VA

AC nominal voltage	220 V / 380 V 230 V / 400 V 240 V / 415 V
AC voltage range	202 V to 305 V
AC grid frequency / range	50 Hz / 44 to 44 Hz. 60 Hz / 54 to 65 Hz.
Rated power frequency / rated grid voltage	50 Hz / 230 V
Max. output current / Rated output current	72,5 A / 72,5 A
Output phases / AC connection	3 / 3-(N)-PE
Power factor at rated power	1
Adjustable displacement power factor	0.0 leading to 0.0 lagging
THD	< 3%
Protective devices	
Input-side disconnection device	Serial
Ground fault monitoring	Serial
Grid monitoring	Serial
DC Reserve polarity protection	Serial
AC Short-circuit current capability	Serial
All-pole sensitive residual-current monitoring unit	Serial
Protection class (according to IEC 62109-1)	I
Oversvoltage category (according to IEC62109-1)	CA: III; CC: II
AC / DC Surge arrester (Type II)	Optional
Efficiency	
Max. efficiency	98,1 %
European efficiency	97,8 %
General data	
Dimensions (W x H x D)	621 x 733 x 569 mm
Weight	84 Kg
Operating temperature range	-25 to 60 °C
Noise emission (typical)	< 65 dB (A)
Self-consumption (at night)	4,8 W
Topology	Transformerless
Cooling concept	OptiCool
Degree of protection (as per IEC 60529)	IP65
Climatic category (according to IEC 60721-3-4)	4K4H
Max. permissible value for relative humidity	100% (non-condensing)
Features / functions / accessories	
DC connection / AC connection	SUNCLIX / screw terminal
Mounting feet	Serial
LED indicators (status / fault / communication)	Serial
Ehternet	2 inputs
WLAN	Serial
RS485	Optional
SMA ModBus	Serial
SunSpec ModBus	Serial
Speedwire, Webconnect	Serial
Multifunction relay	Serial
Expansion Module Slots	2 inputs
OptiTrac Global Peak	Serial
Integrated Plant Control	Serial
Q on Demand 24/7	Serial
Off-grid capable	Yes
SMA Fuel Save Controller compatible	Yes
Certificates and permits	EN 50438:2013*, G59/3, IEC 60068-2-x, IEC 61727, IEC 62109-1/2, IEC 62116, MEA 2016, NBR 16149, NEN EN 50438, NRS 097-2-1, PEA 2016, PPC, RD 1699/413, RD 661/2007, Res. n°7:2013, SI4777, TOR D4, TR 3.2.2, UTE C15-712-1, VDE 0126-1-1, VDE-ARN 4105, VFR 2014, P.O.12.3, NTCO-NTCyS, GC 8.9H, PR20, DEWA

DOWNLOADS

CATÁLOGO GENERAL 2020

 [Catalogo-Bornay-0520.pdf](#)

Size: 21.51 MiB

SMA STP50-40 BROCHURE

 [STP50-40-DEN1728-V20web.pdf](#)

Size: 457.61 KiB
