

Skype



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.



Inversor SMA Sunny Tripower CORE1 STP50-40



Inversor SMA Sunny Tripower CORE1 STP50-40



Inversor SMA Sunny Tripower CORE1 STP50-40



Inversor SMA Sunny Tripower CORE1 STP50-40



Inversor SMA Sunny Tripower CORE1 STP50-40

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	Highly integrated	Fastest Installation	Maximum Yields
<ul style="list-style-type: none"> • Floor mounted device easy to install. • No DC fuses required • Integrated DC disconnect 	<ul style="list-style-type: none"> • Integrated Wi-Fi access with any mobile device • 12 direct string inputs reduce labor and material costs • AC/DC overvoltage protection (optional) 	<ul style="list-style-type: none"> • Fast grid connection due to easy inverter configuration and commissioning. • Completely accessible connection areas. 	<ul style="list-style-type: none"> • 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	6 / 0 V
Start input voltage	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
Overvoltage category	CA: III; CC: II

category,
(according to
IEC62109-1)

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

SMA STP50-40 BROCHURE

 [STP50-40-DEN1728-V20web.pdf](#) (457.61 KiB)
Size: 457.61 KiB
