

SUNNY CENTRAL 100 OUTDOOR / 100 INDOOR



SC 100



Flexible

- For indoor and outdoor installation
- Extended temperature range from -20 °C to +50 °C
- Compact dimensions, easier installation

Efficiency

- 97.6 % leading edge efficiency

Reliable

- System monitoring via integrated data logger
- Easy remote querying using remote access

Optional

- String monitoring
- DC input voltage range up to 1000 V
- Operation with a grounded PV generator

SUNNY CENTRAL 100 Outdoor / 100 Indoor

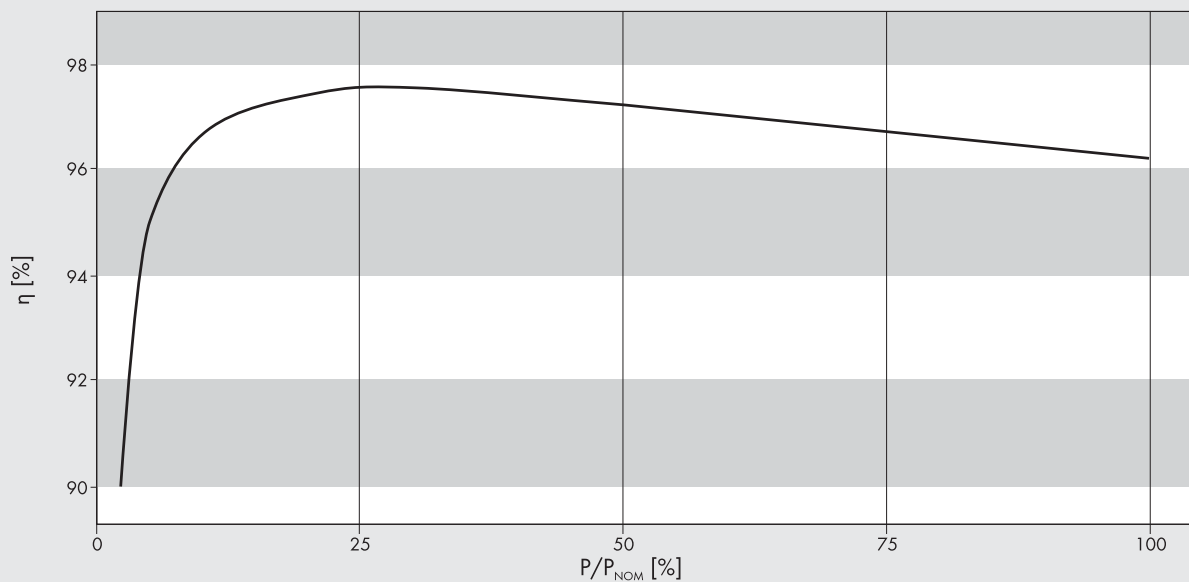
Concentrated power at an attractive price

Powerful and efficient: The Sunny Central 100 Outdoor is perfectly suited for implementing large-scale solar power plants in open spaces. With a weatherproof enclosure and extended temperature range, it is the first choice for reliable outdoor operation – even under harsh climatic conditions. Plant operators benefit twice: the compact design greatly reduces installation work, and thanks to innovative transformer technology, the leading edge efficiency has again been improved. As a result, it is the most efficient inverter in its class. The indoor version is equipped with a special ventilation concept for utilization indoors.

SUNNY CENTRAL 100 Outdoor / 100 Indoor

Technical data	Sunny Central 100 Indoor	Sunny Central 100 Outdoor	Sunny Central 100 Indoor / Outdoor HE
Input data			
Nominal DC power	105 kW	105 kW	103 kW
Max. DC power	115 kWp ¹⁾	115 kWp ¹⁾	115 kWp ¹⁾
MPP voltage range	450 V – 820 V ⁵⁾	450 V – 820 V ⁵⁾	450 V – 820 V ⁵⁾
Max. DC voltage	1000 V	1000 V	1000 V
Max. DC current	235 A	235 A	235 A
Number of DC inputs	3	3	3
Output data			
Nominal AC power	100 kW	100 kW	100 kW
Nominal AC voltage	400 V	400 V	300 V
Nominal AC current	145 A	145 A	193 A
AC grid frequency 50 Hz	●	●	●
AC grid frequency 60 Hz	●	●	●
Max. cos φ	> 0.99	> 0.99	> 0.99
Max. THD	< 3 %	< 3 %	< 3 %
Power consumption			
Internal consumption in operation	< 1000 W	< 1000 W	< 1000 W
Standby consumption	< 50 W	< 50 W	< 50 W
External auxiliary supply voltage	230 V, 50/60 Hz	230 V, 50/60 Hz	230 V, 50/60 Hz
External back-up fuse for auxiliary supply	B 16 A, 1-pole	B 16 A, 1-pole	B 16 A, 1-pole
Dimensions and weight			
Height	1835 mm	1835 mm	1835 mm
Width	1280 mm	1280 mm	1280 mm
Depth	830 mm	830 mm	830 mm
Weight	925 kg	925 kg	505 kg
Efficiency ²⁾			
Max. efficiency	97.6 %	97.6 %	98.5 %
Euro-eta	97.0 %	97.0 %	98.3 %
Protection rating and ambient conditions			
Protection rating (as per EN 60529)	IP20	IP44, IP54	IP44, IP54
Operating temperature range	-20 °C ... +50 °C ⁴⁾	-20 °C ... +50 °C ⁴⁾	-20 °C ... +50 °C ⁴⁾
Rel. humidity	15 % ... 95 %	15 % ... 95 %	15 % ... 95 %
Fresh air consumption	2300 m³/h	2300 m³/h	2300 m³/h
Max. altitude (above sea level)	1000 m	1000 m	1000 m

Efficiency curve SUNNY CENTRAL 100 Outdoor / 100 Indoor



	Sunny Central 100 Indoor	Sunny Central 100 Outdoor	Sunny Central 100 Indoor / Outdoor HE*
Features			
Display: text line / graphic	●/—	●/—	●/—
Ground fault monitoring	● (optionally adjustable)	● (optionally adjustable)	● (optionally adjustable)
Heating	●	●	●
Emergency stop	●	—	● / —
Circuit breaker AC side	○	○	○
Circuit breaker DC side	motor-driven	motor-driven	motor-driven
Monitored overvoltage protectors AC / DC	○	○	○
Monitored overvoltage protectors for auxiliary supply	○	○	○
SCC (Sunny Central Control) interfaces			
Communication (NET Piggy-Back, optional)	analog, ISDN, Ethernet	analog, ISDN, Ethernet	analog, ISDN, Ethernet
Analog inputs	optional 1 x PT 100, 2 x A _{in} ³⁾		
Overvoltage protection for analog inputs	○	○	○
Sunny String-Monitor connection (COM1)	RS485	RS485	RS485
PC connection (COM3)	RS232	RS232	RS232
Electrically separated relay (ext. alert signal)	1	1	1
Certificates / listings			
EMC	EN 61000-6-2 EN 61000-6-4		
CE conformity	●	●	●
RD 1633 / 2000	●	●	●
● standard features ○ optional features — not available			
Type designation	SC 100	SC 100	SC 100

*HE: High Efficiency, inverter without galvanic isolation for connection to a medium-voltage transformer

1) Specifications apply to irradiation values = 1000 (kWh/(kWp x year))

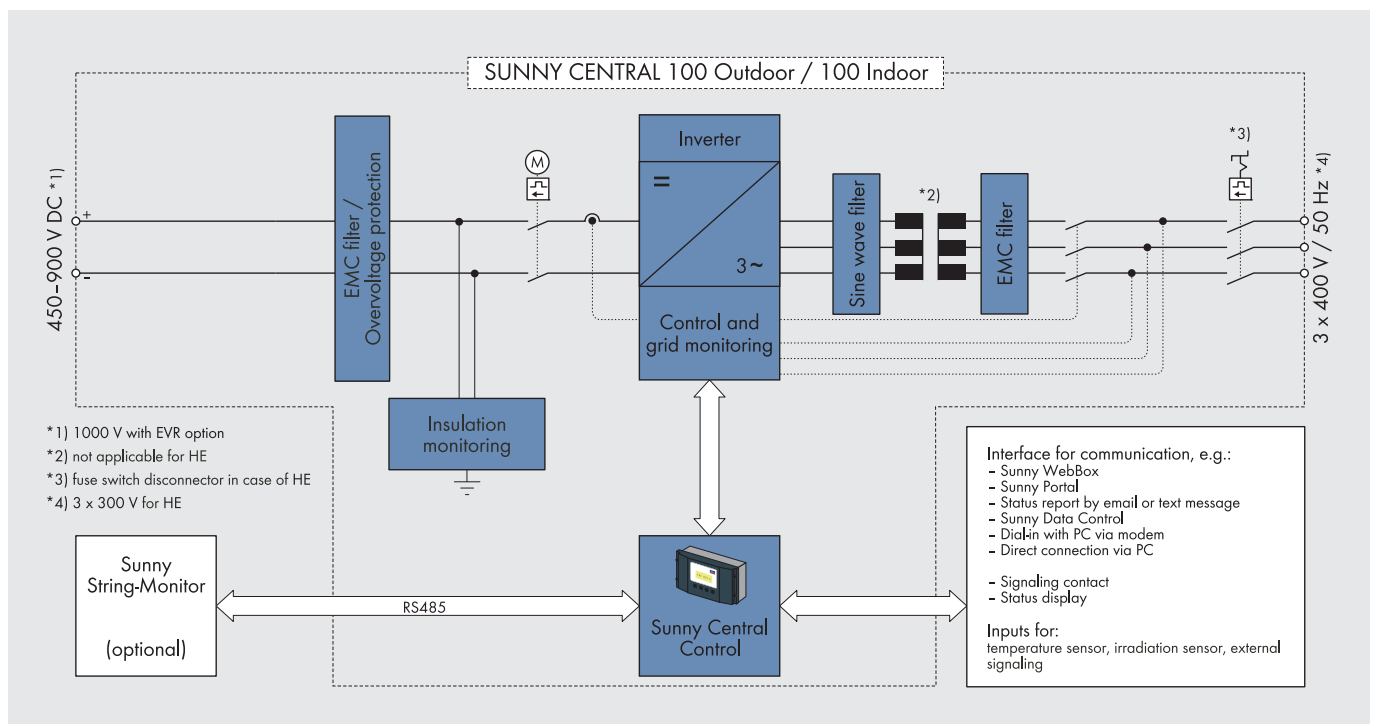
2) Efficiency measured without an internal power supply at $U_{DC} = 500$ V

3) Terminal for an analog sensor provided by the customer in two-wire and four-wire version

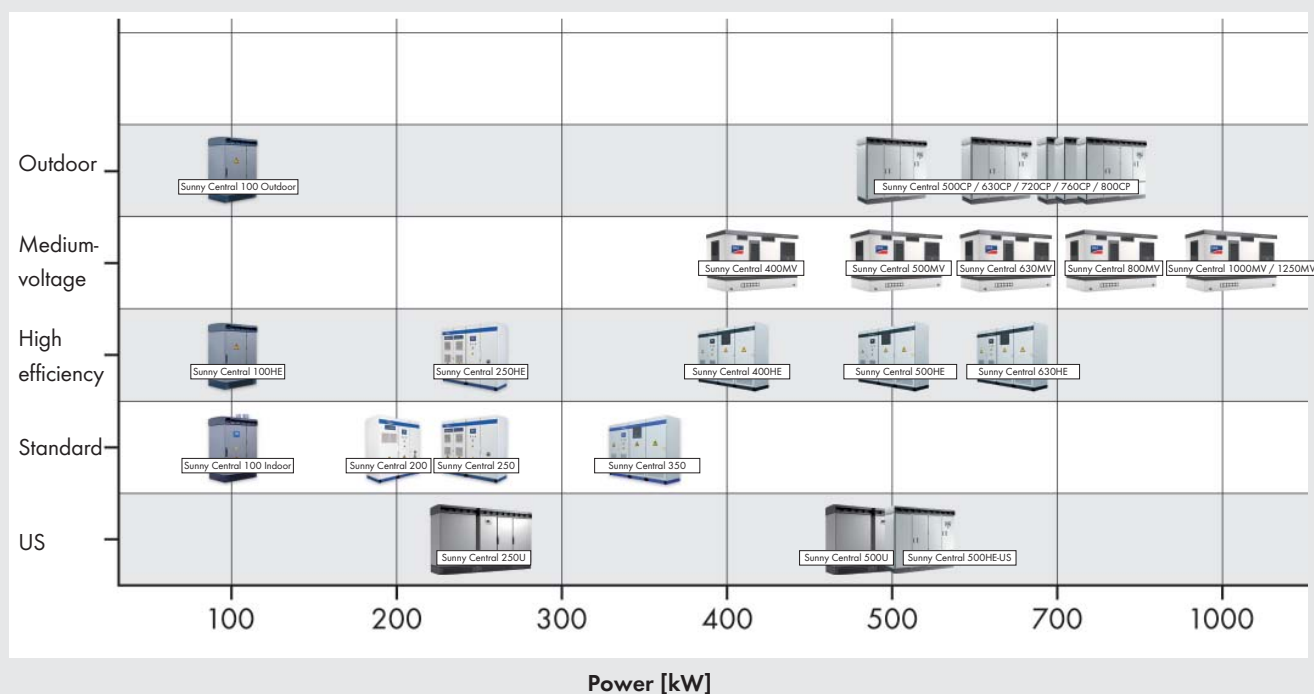
4) Complies with nominal values up to an ambient temperature of +40 °C, at an ambient temperature of +50 °C the nominal values are held for two hours.

5) $U_{DC\ min}$ at $U_{AC, nom} \pm 5\%$ and $\cos \varphi = 1$

Note: Transport instructions for Sunny Central, the Sunny Central Installation Guide, a suitable foundation, sufficient ventilation and appropriate sun shading systems are necessary.



SUNNY CENTRAL PRODUCT OVERVIEW



Accessories



Sunny String Monitor

