

Reliable

- Motorized disconnector on the DC side
- Overvoltage protection on DC and AC side

Communicative

- Easy remote querying using remote access
- Status messages can be sent via e-mail or SMS

Optional

- String current monitoring
- Extended DC input voltage range up to 1000 V

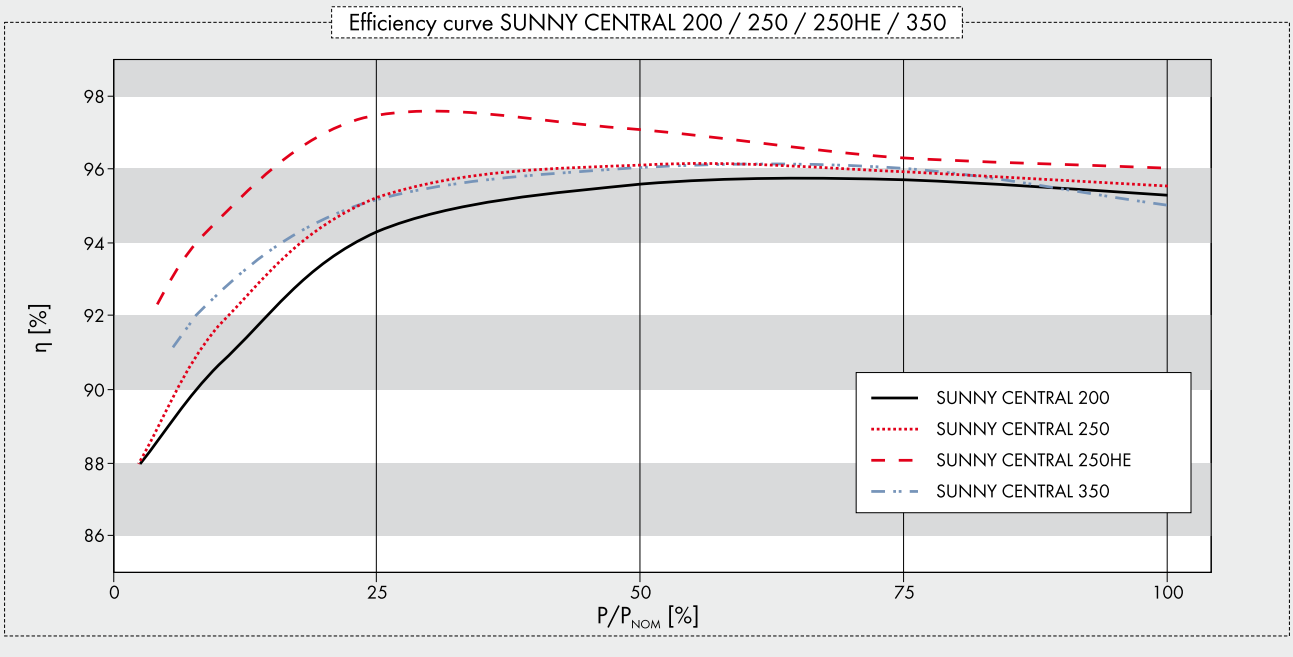
SUNNY CENTRAL 200 / 250 / 250HE / 350

Direct line to the low-voltage grid

First choice for usage in medium-sized and large-scale PV power plants: with the proven Sunny Centrals 200, 250 and 350, plant operators can realize very good solar yields, especially in ground-mounted systems or roof systems with homogeneous structure. The central inverters have five, eight or twelve fused inputs respectively for the DC distributor box. Several devices can be connected together on the AC side. This makes generator powers in the megawatt range possible. Whereas the Sunny Central 200, 250 and 350 feed directly into the low voltage range, the Sunny Central 250HE can be connected directly to a medium-voltage transformer.

SUNNY CENTRAL 200 / 250 / 250HE / 350

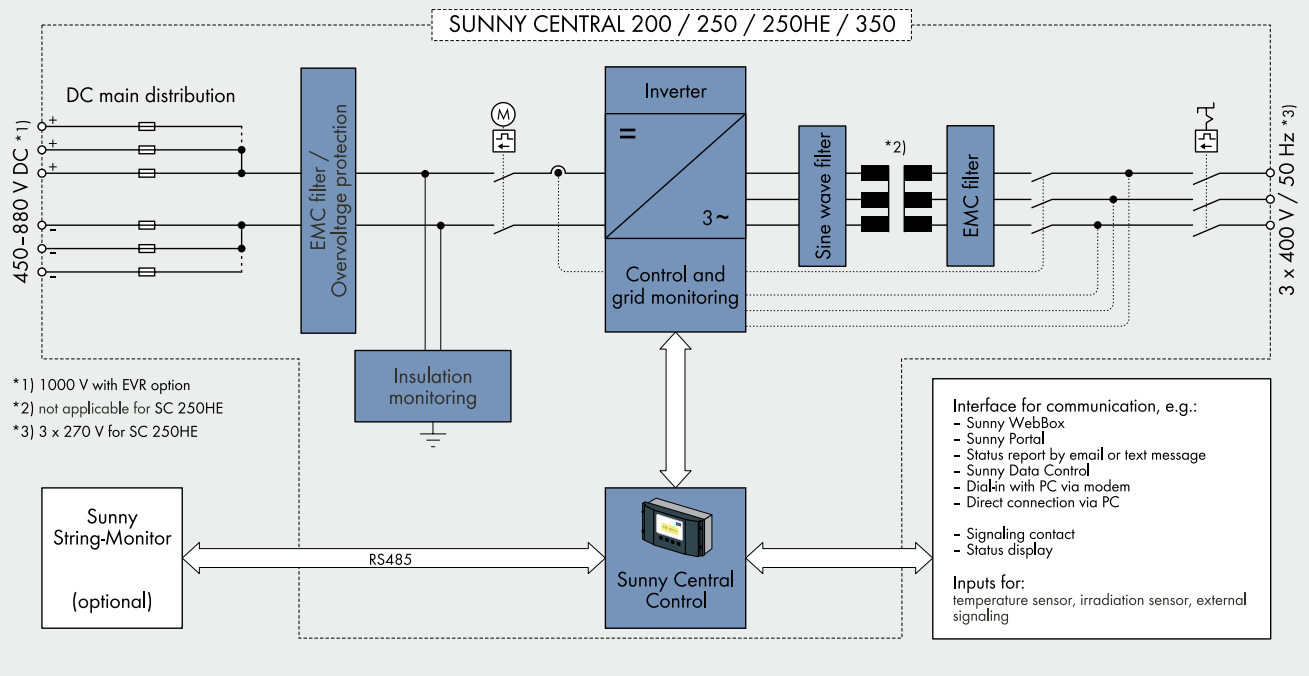
Technical data	Sunny Central 200	Sunny Central 250	Sunny Central 250HE	Sunny Central 350
Input data				
Nominal DC power	210 kW	262 kW	261 kW	369 kW
Max. DC power	230 kWp [1]	290 kWp [1]	285 kWp [1]	405 kWp [1]
MPP voltage range	450 V – 820 V [5]	450 V – 820 V [5]	450 V – 820 V [5]	450 V – 820 V [5]
Max. DC voltage	880 V	880 V	880 V	880 V
Max. DC current	472 A	591 A	591 A	800 A
Number of DC inputs	5	8	8	12
Output data				
Nominal AC power	200 kW	250 kW	250 kW	350 kW
Nominal AC voltage ± 10 %	400 V	400 V	270 V	400 V
Nominal AC current	289 A	361 A	535 A	505 A
AC grid frequency 50 Hz	●	●	●	●
AC grid frequency 60 Hz	●	●	●	●
Max. cos φ	> 0.98	> 0.98	> 0.98	> 0.98
Max. THD	< 3 %	< 3 %	< 3 %	< 3 %
Power consumption				
Internal consumption in operation	< 1000 W	< 1500 W	< 1500 W	< 2500 W
Standby consumption	< 70 W	< 80 W	< 80 W	< 70 W
External auxiliary supply voltage	230 V, 50/60Hz	400 V, 50/60 Hz	400 V, 50/60 Hz	400 V, 50/60 Hz
External back-up fuse for auxiliary supply	B 16 A, 1-pole	B 16 A, 3-pole	B 16 A, 3-pole	B 16 A, 3-pole
Dimensions and weight				
Height	2120 mm [4]	2120 mm [4]	2120 mm [4]	2120 mm [4]
Width	2000 mm	2400 mm	2400 mm	2800 mm
Depth	850 mm	850 mm	850 mm	850 mm
Weight	1600 kg	2070 kg	1170 kg	2800 kg
Efficiency [2]				
Max. efficiency	95.7 %	96.1 %	97.5 %	96.0 %
Euro-eta	94.5 %	95.2 %	96.7 %	95.2 %
Protection rating and ambient conditions				
Protection rating (as per EN 60529)	IP20	IP20	IP20	IP20
Operating temperature range	–20 °C ... +40 °C	–20 °C ... +40 °C	–20 °C ... +40 °C	–20 °C ... +40 °C
Rel. humidity	15 % ... 95 %	15 % ... 95 %	15 % ... 95 %	15 % ... 95 %
Fresh air consumption	3300 m^3/h	4200 m^3/h	3500 m^3/h	6500 m^3/h
Max. altitude (above sea level)	1000 m	1000 m	1000 m	1000 m



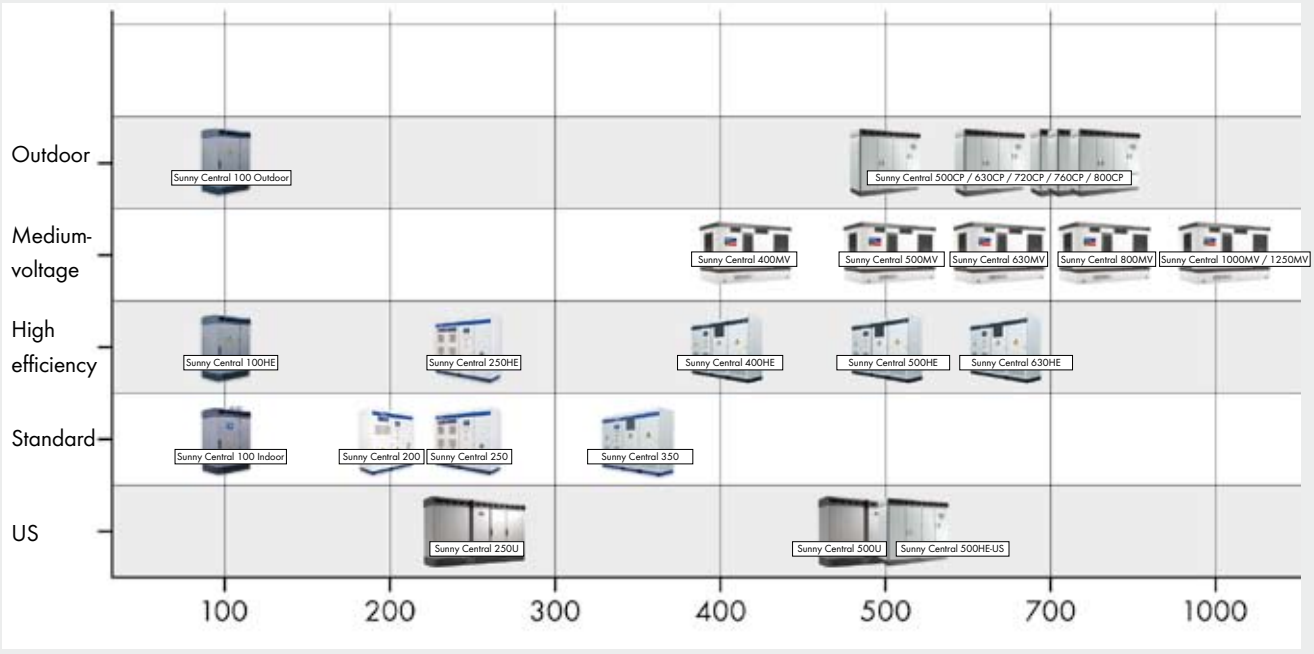
	Sunny Central 200	Sunny Central 250	Sunny Central 250HE	Sunny Central 350
Features				
Display: text line / graphic	●/–	●/–	●/–	●/–
Ground fault monitoring	●	●	●	●
Heating	●	●	●	●
Emergency stop	●	●	●	●
Circuit breaker AC side	●	●	Fuse-switch-disconnector	●
Circuit breaker DC side	motor-driven	motor-driven	motor-driven	motor-driven
Monitored overvoltage protectors AC	● (not with TT grid)	● (not with TT grid)	●	● (not with TT grid)
Monitored overvoltage protectors DC	●	●	●	●
Monitored overvoltage protectors for auxiliary supply	● (not with TT grid)	● (not with TT grid)	●	● (not with TT grid)
SCC (Sunny Central Control) interfaces				
Communication (NET Piggy-Back, optional)	analog, ISDN, Ethernet	analog, ISDN, Ethernet	analog, ISDN, Ethernet	analog, ISDN, Ethernet
Analog inputs	1 x PT 100, 2 x A_{in} [3]	1 x PT 100, 2 x A_{in} [3]	1 x PT 100, 2 x A_{in} [3]	1 x PT 100, 2 x A_{in} [3]
Overvoltage protection for analog inputs	O	O	O	O
Sunny String-Monitor connection (COM1)	RS485	RS485	RS485	RS485
PC connection (COM3)	RS232	RS232	RS232	RS232
Electrically separated relay (ext. signal)	1	1	1	1
Certificates / listings				
EMC	EN 61000-6-2 EN 61000-6-4			
CE conformity	●	●	●	●
EEG conformity [6]	●	●	●	●
RD 1633 / 2000	●	●	●	●
● standard features O optional features – not available				
Type designation	SC 200	SC 250	SC 250HE	SC 350

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) The switch cabinet is raised by 210 mm for the EVR option
5) $U_{DC\,min}$ at $U_{AC,\,nom}$ ±5 % and cos φ = 1
6) Grid stability management and static voltage support

Please also read: Transport instructions for Sunny Central and the Sunny Central Installation Guide



SUNNY CENTRAL PRODUCT OVERVIEW

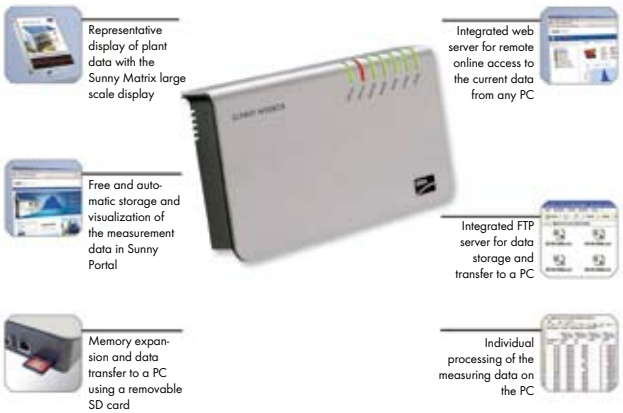


Power [kW]

Accessories



Sunny String Monitor



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