

Technical Data Sunny Central SC100 outdoor

Sunny Central - data	Abbreviation	SC100 outdoor
Input Data		
Max. PV-power (recommended)	P_{PV}	110 kW _p ^{a)}
DC- voltage range, MPPT	U_{DC}	450 - 820 V
Max. permissible DC voltage	$U_{DC, max}$	900 V / optional 1000 V
Max. permissible DC current	$I_{DC, max}$	235 A
Voltage ripple PV voltage	U_{PP}	< 3 %
Number of DC ports / connection point not fused		3 x plus (120 mm ²) M12 screws 3 x minus (120 mm ²) M12 screws
Output Data		
Nominal AC power	P_{AC}	100 kW
Operating voltage grid +/- 10 %	U_{AC}	400 V
Nominal AC current	$I_{AC, nom}$	145 A
Utility type		TT, TN-S, TN-C-grid
Operating frequency grid	f_{AC}	50 Hz - 60 Hz
THD of grid current	THD_{IAC}	< 3 % at nominal power
Phase shift	$\cos \varphi$	$\geq 0,99$ at nominal power
Efficiency^b		
10 % ; 25 % ; 50 % ; 75 % ; 100 % of $P_{AC, nom}$	$\eta_{10, 25, 50, 75, 100}$	94,2 / 96,4 / 96,7 / 96,4 / 96,2 %
Euroeta	η	96,2 % ^{b)}
Size and Weight		
Width / Height / Depth [mm]	W/H/D	1280 / 1835 / 830
Weight (approx.)	m	925 kg
Power Consumption		
Internal consumption in operation	P_{day}	< 1 % of $P_{AC, nom}$
Internal consumption in stand-by	P_{night}	< approx. 50 W
Auxiliary power supply / grid type		optional 230 V, 50/60 Hz TN-S
Fuse for auxiliary power supply		B 16 A, 1 pol.
Interfaces SCC (Sunny Central Control)		
Communication (optional)		Analog, ISDN, Ethernet, GSM
Analog input ports		Optional 1x PT 100, 2x A_{in} ^{c)}
Surge voltage arrester for analog inputs		Optional
Connection to Sunny String Monitor	COM1	RS485
Connection to PC	COM3	RS232
Dry contact relay (electrically separated) for external signal		1

a. These values are valid for irradiation = $1000 \frac{kWh}{kWp \cdot Anno}$

b. Efficiency measured without internal power supply at $U_{DC} = 500 V$

c. Connection of customers analog sensor (two-wire)

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Features		
Enclosure color		base + roof RAL 7024 enclosure 9022
Display	SCC	yes
Ground fault monitoring		yes (optionally adjustable)
Heating system		yes
Emergency off switch		no
Power switch AC side		yes
Power switch DC side		electric
Monitored surge voltage arrestors AC		optional
Monitored surge voltage arrestors DC		yes
Monitored surge voltage arrestors auxiliary power		yes
Standards		
EMC		EN 61000-6-2, EN 61000-6-4
Grid monitoring		according to VDEW guidelines
CE conformity		yes
Enclosure Rating and Ambient Conditions		
Enclosure type according to EN 60529		IP44 / IP54
Enclosure type according to EN 60721-3-4 ambient conditions, fixed location, without special protection against wind and weather.		<ul style="list-style-type: none"> Classification of chemically active substances: 4C1 Classification of mechanically active substances: 4S2
Permissible ambient temperature	T	-20 °C ... +50 °C ^{a)}
Humidity (non condensing)	U _{Air}	15 ... 95 %
Maximum elevation above sea level		1.000 m
Air consumption	V _{air}	2,300 m ³ /h
Air conduction outside mounting		Air intake through the roof Air outtake through the base

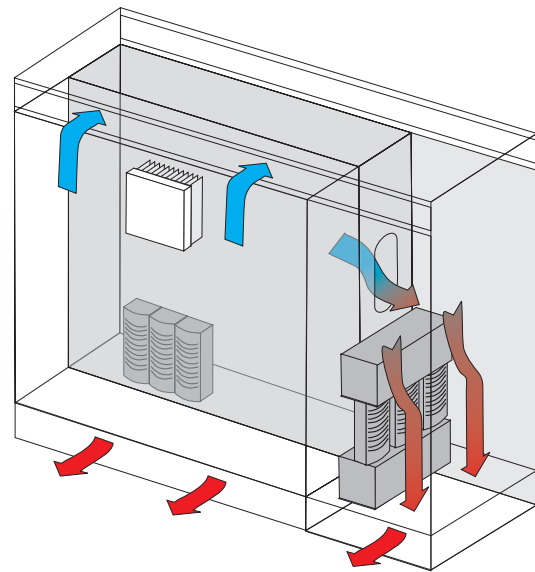
a. Maintenance of the nominal values up to an ambient temperature of +40 °C, with an ambient temperature of +50 °C maintenance of the nominal values up to two hours.

Please also pay attention to:

- the „Sunny Central Transportation Guidelines“,
- the „Sunny Central Installation Guide“,
- that the Sunny Central SC 100 Outdoor requires a suitable base, good ventilation and Sunny Protection.

Different Views of the Sunny Central SC100 outdoor

Ventilation of the Sunny Central SC100 outdoor



Picture of the Sunny Central SC100 outdoor

