

Technical Data Sunny Central SC150

Sunny Central - data	Abbreviation	SC150
Input Data		
Max. PV-power (recommended)	P_{PV}	175 kWp ^{a)}
DC- voltage range, MPPT	U_{DC}	450 - 820
Max. permissible DC voltage	$U_{DC, max}$	880 V
Max. permissible DC current	$I_{DC, max}$	354 A
Number of DC ports / connection point		5 / DC-Circuit Breaker
Output Data		
Nominal AC power	P_{AC}	150 kW
Operating voltage grid +/- 10 %	U_{AC}	400 V
Nominal AC current	$I_{AC, nom}$	216 A
Utility type		TT, TN-S, TN-C-grid
Operating frequency grid	f_{AC}	50 Hz - 60 Hz
Voltage ripple PV voltage	U_{PP}	< 3 %
THD of grid current		< 3 % at nominal power
Phase shift	$\cos \varphi$	$\geq 0,98$ at nominal power
Efficiency^b		
10 % ; 25 % ; 50 % ; 75 % ; 100 % of $P_{AC, nom}$	$\eta_{10, 25, 50, 75, 100}$	90 / 94 / 95 / 95 / 94 %
Euroeta	η	94,7 %
Size and Weight		
Width / Height / Depth [mm]	W/H/D	800 + 1,200 / 2,120 / 850
Weight (approx.)	m	1,500 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		3 x 400 V, 50 Hz TN-S grid
Fuse for auxiliary power supply		B 20 A, 3 pol.
Interfaces SCC (Sunny Central Control)		
Communication (optional)	NET Piggy Back	Analog, ISDN, Ethernet, GSM
Analog input ports		1 x PT 100, 2 x A_{in} ^{c)}
Analog input ports with surge voltage arrestor		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 = $1,000 \frac{kWh}{kWp \cdot Year}$

b. Efficiency measured without internal power supply at $U_{DC} = 600 V$

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

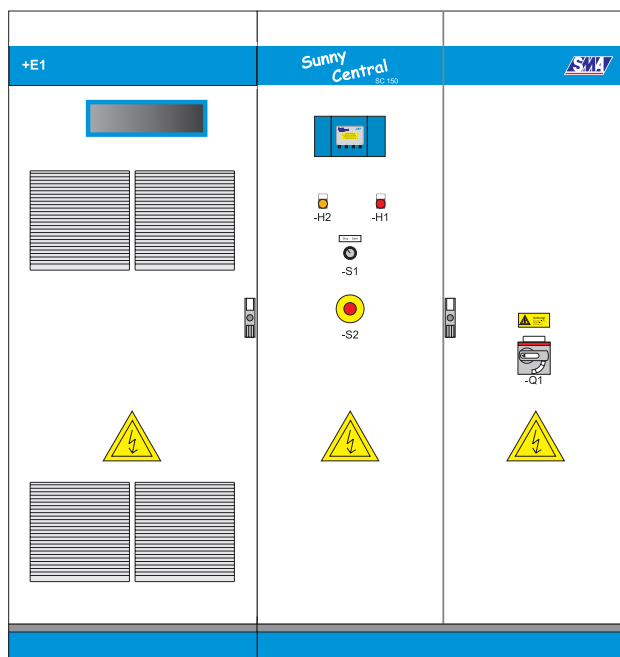
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Features		
Enclosure color		RAL 7035
Display	SCC	yes
Ground fault monitoring		yes
Heating system		yes
Emergency off switch		yes
Power switch AC side		yes
Power switch DC side		electric
Monitored surge voltage arrestors AC		yes
Monitored surge voltage 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		IP20
Enclosure type according to EN 60721-3-3, fixed location, with protection against wind and weather.		<ul style="list-style-type: none"> • Classification of chemically active substances: 3C1L • Classification of mechanically active substances: 3S2
Permissible ambient temperature	T	-20 °C ... +40 °C
Humidity (non condensing)	U _{Air}	15 ... 95 %
Maximum elevation above sea level		1,000 m
Air consumption	V _{air}	3,300 m ³ /h

Please also pay attention to:

- the „Sunny Central Transportation Guidelines“,
- the „Sunny Central Installation Guide“,

Different Views of the Sunny Central SC150

Frontal view of the Sunny Central SC150



Picture of the Sunny Central SC150

