

Sunny Central 125 (Preliminary *) Technical Data

Input Values (480V)		
Recommended max PV Power	P_{PV}	~165KWp STC
Max DC Power	$P_{DC, max}$	125 KWp PTC
Max DC Voltage	$V_{DC, max}$	600 Vdc
PV Voltage range, MPP	V_{PV}	275V to 600V
Max input current	$I_{PV, max}$	400 A
DC Voltage ripple	V_{PP}	< 3%
DC Disconnectors		Internal Redily Accessable DC Breaker
Pole confusion protection		Short Circuit diode
Ground fault protection	I_{Dif}	> 1000 mA
Output Values (480V)		
Max AC Power	P_{AC}	125 KW @ 45°C
Total Harmonic Distortion	THD_{IAC}	< 4% (With $K_{Vgrid} < 2%$ and $P_{AC} > 0.5 P_{ACnom}$)
Operating Range, Grid Voltage	V_{AC}	422 V to 528 V
Operating Range, Grid Frequency	f_{AC}	59.3 Hz - 60.5 Hz
Phase Shift (Ref. Fundamental)	$cos(phi)$	0°
Power Factor		Unity/td>
Output Protection		
AC Disconnect		Internal Redily Accessable AC Breaker
Short Circuit Protection		Current Controlled
Oversvoltage Classification		III
Efficiency		
Peak Efficiency		94.4 % (Including Isolation Transformer)
Power Consumption		
Internal consumption in operation		100 W
Internal consumption at night		100 W
American Standards		
Power Quality		IEEE 519
Anti-Islanding		IEEE 929
Electro-Magnetic Interference		FCC Part 15 A & B
Size and Weight		
Width		2350 mm (93 in)
Height		1800 mm (71 in)

Depth		600 mm (24 in)
Weight		ca. 1200 kg (2650 lbs)
Enclosure Ratings		
NEMA Rating	Bridge	NEMA 4
NEMA Rating	Main	NEMA 3R Powder coated, stainless steel and aluminum
Ambient Conditions		
Ambient Temperature Range		-13°F to +122°F or -25°C to +50°C
Relative Humidity Level		0 to 100%