

SUNNY MINI CENTRAL 7000HV

SMC 7000HV-11



Efficient

- OptiCool active temperature management
- The best MPP tracking efficiency with OptiTrac MPP tracking

Reliable

- Galvanic isolation
- Integrated ESS DC switch-disconnector
- SMA Power Balancer for three-phase grid connection

Flexible

- Integrated reactive power capability and grid management functions
- Input voltage range of up to 800 V
- Suitable for PV array grounding

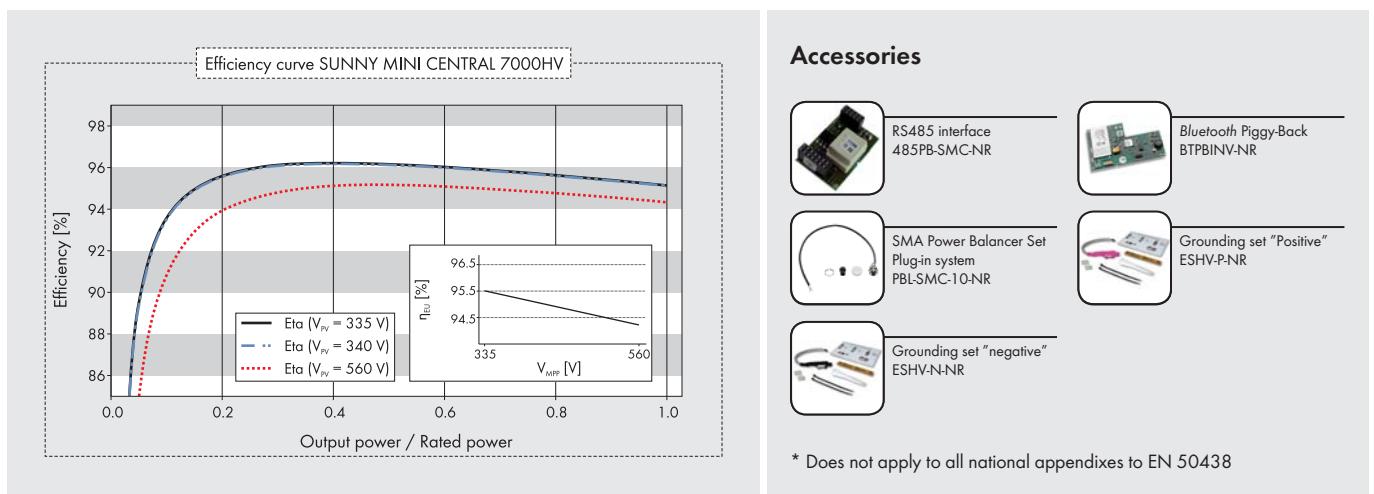
Simple

- SUNCLIX DC plug system

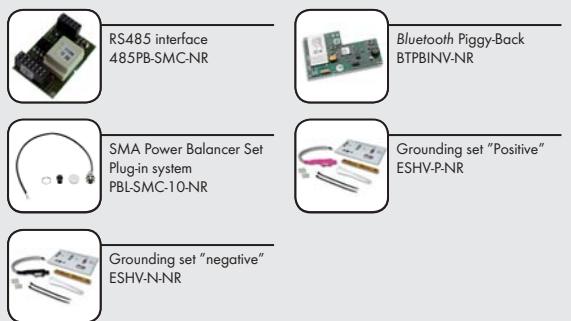
SUNNY MINI CENTRAL 7000HV

The champion for thin-film projects

More modules can be connected in series with the Sunny Mini Central 7000HV than with common inverters. This reduces cabling costs on the DC side and simplifies the installation. Due to its galvanic isolation, the device can be used both with crystalline cells and thin-film PV modules. Its performance range allows the installation of large PV arrays using smaller string inverters, resulting in more detailed PV plant monitoring. Its new reactive power and grid management functions mean it is also suitable for demanding applications.



Accessories



* Does not apply to all national appendixes to EN 50438

Technical Data		Sunny Mini Central 7000HV
Input (DC)		
Max. DC power (@ cos φ = 1)		7500 W
Max. input voltage		800 V
MPP voltage range / rated input voltage		335 V - 560 V / 340 V
Min. input voltage / initial input voltage		290 V / 400 V
Max. input current		23 A
Max. input current per string		23 A
Number of independent MPP inputs / strings per MPP input		1 / 4
Output (AC)		
Rated output power (@ 230 V, 50 Hz)		6650 W
Max. apparent AC power		7000 VA
Nominal AC voltage / range		220 V, 230 V, 240 V / 160 V - 265 V
AC power frequency / range		50 Hz, 60 Hz / -6 Hz ... +5 Hz
Rated power frequency / rated grid voltage		50 Hz / 230 V
Max. output current		31 A
Power factor at rated output power		1
Adjustable displacement power factor		0.8 overexcited ... 0.8 underexcited
Feed-in phases / connection phases		1 / 1
Power balancing		●
Efficiency		
Max. efficiency / European weighted efficiency		96.2 % / 95.5 %
Protection devices		
DC disconnect device		●
Ground fault monitoring / grid monitoring		● / ●
DC reverse-polarity protection / AC short-circuit current capability / galvanically isolated		● / ● / ●
Protection class (according to IEC 62103) / overvoltage category (according to IEC 60664-1)		I / III
General data		
Dimensions (W / H / D)		468 / 613 / 242 mm (18.4 / 24.1 / 9.5 in)
Weight		65 kg / 143.3 lb
Operating temperature range		-25 °C ... +60 °C / -13 °F ... +140 °F
Noise emission (typical)		41 dB(A)
Internal consumption (night)		0.25 W
Topology		LF transformer
Cooling concept		OptiCool
Degree of protection (according to IEC 60529)		IP65
Climatic category (according to IEC 60721-3-4)		4K4H
Maximum permissible value for relative humidity (non-condensing)		100 %
Features		
DC terminal		SUNCLIX
AC terminal		Screw terminal
Display		Text line
Interface: RS485 / Bluetooth®		○ / ○
Warranty: 5 / 10 / 15 / 20 / 25 years		○ / ○ / ○ / ○ / ○
Certificates and approvals (more available on request)		CE, VDE 0126-1-1, C10/C11, PPDS, EN 50438*, AS 4777, PPC, IEC 61727, RD661/2007, VDE-AR-N 4105, UTE C15.712-1, G59/2, RD1699
● Standard features ○ Optional features – Not available Data at nominal conditions		
Type designation		SMC 7000HV-11