

SUNNY MINI CENTRAL 7000HV



SMC 7000HV-11



NEW FUNCTIONS

Efficient

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

Safe

- 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 generator grounding*

Simple

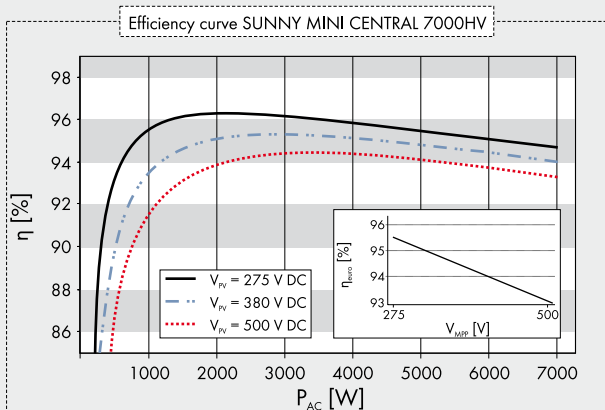
- DC plug system SUNCLIX

SUNNY MINI CENTRAL 7000HV

The champion for thin-film projects

Reduced installation costs thanks to greater input voltage range: with the Sunny Mini Central 7000HV, more modules can be connected in series than with common inverters. This reduces cabling costs on the DC side and simplifies the installation. Due to its galvanic isolation, the Sunny Mini Central 7000HV can be used both with crystalline cells and thin film modules. Its performance range permits the installation of large PV plants made up of smaller units, which allows for more detailed system monitoring. Its new reactive power and grid management functions mean it is also suitable for international use.

Technical data	Sunny Mini Central 7000HV
Input (DC)	
Max. DC power (@ $\cos \varphi = 1$)	7500 W
Max. DC voltage	800V
MPP voltage range	335 V – 560 V
DC nominal voltage	340 V
Min. DC voltage / start voltage	290 V / 400 V
Max. input current / per string	23 A / 23 A
Number of MPP trackers / strings per MPP tracker	1 / 4
Output (AC)	
AC nominal power (@ 230 V, 50 Hz)	6650 W
Max. AC apparent power	7000 VA
Nominal AC voltage; range	220, 230, 240 V; 180 V – 260 V (262 V**)
AC grid frequency; range	50, 60 Hz; –6 +5 Hz
Max. output current	31 A
Power factor ($\cos \varphi$)	0.8 leading ... 0.8 lagging
Phase conductors / connection phases / power balancing	1 / 1 / ●
Efficiency	
Max. efficiency / Euro-eta	96.2 % / 95.5 %
Protection devices	
DC reverse-polarity protection / reverse current protection	●/–
ESS switch-disconnector	●
AC short circuit protection	●
Ground fault monitoring	●
Grid monitoring (SMA Grid Guard)	●
Galvanically isolated / all-pole sensitive fault current monitoring unit	●/–
DC overvoltage protector (type II), can be integrated	–
String failure detection	–
Protection class / overvoltage category	I / III
General data	
Dimensions (W / H / D) in mm	468 / 613 / 242
Weight	65 kg
Operating temperature range	–25 °C ... +60 °C
Noise emission (typical)	≤ 41 dB(A)
Internal consumption: (night)	0.25 W
Topology	LF transformer
Cooling concept	OptiCool
Electronics protection rating / connection area (as per IEC 60529)	IP65 / IP65
Climatic category (per IEC 60721-3-4)	4K4H
Features	
DC connection: SUNCLIX	●
AC connection: screw terminal / spring-type terminal	●/–
Display: text line / graphic	●/–
Interfaces: RS485 / Bluetooth	○/○
Warranty: 5 / 10 / 15 / 20 / 25 years	●/○/○/○/○
Certificates and permits (more available on request)	CE, VDE 0126-1-1, DK 5940**, RD 1663, C10/C11, PPDS, EN 50438***, AS 4777, IEC 61727, PPC
* Variants for France under preparation **Only applies to IT variants, *** Does not apply to all national deviations of EN 50438	
● Standard features ○ Optional features – not available	
Data at nominal conditions	
Type designation	SMC 7000HV-11



Accessories



RS485 interface of type
485PB-NR



Bluetooth Piggy Back
BTPBINV-NR



SMA Power Balancer
Plug connector PBL-SMC-
10-NR



Grounding set "Positive"
ESHV-P-NR*



Grounding set "Negative"
ESHV-P-NR*