SUNNY BOY 5.5-JP including SMA SMART CONNECT





SMA Smart Connect

- Investment security included
- Automatic monitoring by SMA
- Proactive information and automatic service

Easy to Use

- 100% plug and play installation
- Commissioning via smartphone or tablet
- WLAN and intuitive webserver
- One-person installation due to low weight of 18 kg

Everything at a Glance

- Free online monitoring
- PV system data viewable via smartphone
- Sunny Portal powered by ennexOS

Future-Proof

- Supports Power Curtailment
- Intelligent energy management and storage solutions can be added anytime
- High DC/AC ratio

SUNNY BOY 5.5-JP

More than just an inverter. Smaller, simpler and more convenient with SMA Smart Connect

The new Sunny Boy 5.5-JP succeeds the successful Sunny Boy 3500 – 5400TL-JP for the "Low Voltage" Market application. It is more than just a PV inverter: with the integrated SMA Smart Connect service, it offers all-round comfort for PV system operators and installers alike. The automatic inverter monitoring by SMA analyzes operation, reports irregularities and thus minimizes downtime. The Sunny Boy is ideally suited to solar power generation in "Low Voltage" plants. Thanks to its extremely light design and location of the external connections, the device can be quickly installed and easily commissioned thanks to the intuitive webserver. The standard device already have IP65 and resist heavy salt conditions.

SMA SMART CONNECT

The integrated service for ease and comfort

SMA Smart Connect^{*} is the free monitoring of the inverter via the SMA Sunny Portal. If there is an inverter fault, SMA proactively informs the PV system operator and the installer. This saves valuable working time and costs.

With SMA Smart Connect, the installer benefits from rapid diagnoses by SMA. They can thus quickly rectify the fault and score points with the customer thanks to the attraction of additional services.





ACTIVATION OF SMA SMART CONNECT

During registration of the system in the Sunny Portal, the installer activates SMA Smart Connect and benefits from the automatic inverter monitoring by SMA.



AUTOMATIC INVERTER MONITORING

SMA takes on the job of inverter monitoring with SMA Smart Connect. SMA automatically checks the individual inverters for anomalies around the clock during operation. Every customer thus benefits from SMA's long years of experience.

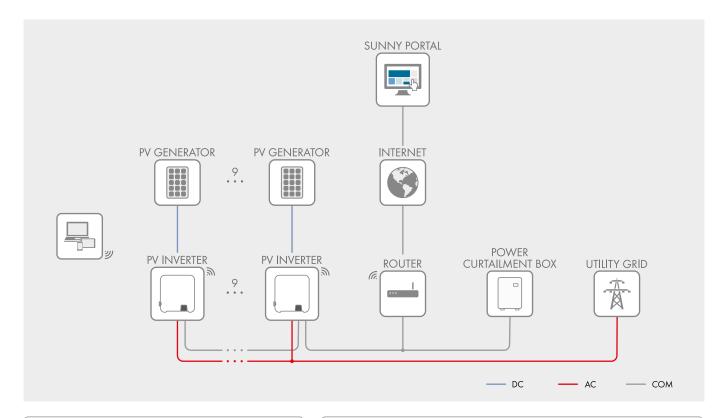


PROACTIVE COMMUNICATION IN THE EVENT OF FAULTS

After a fault has been diagnosed and analyzed, SMA informs the installer and end customer immediately by e-mail. Everyone is thus optimally prepared for the troubleshooting. This minimizes the downtime and saves time and money. The regular power reports also provide valuable information about the overall system.

* Details: see document "Description of Services - SMA SMART CONNECTED"

Technical data	Sunny Boy 5.5-JP
Input (DC)	
Max. generator power	13750 Wp
Max. DC/AC ratio	250 %
Max. input voltage	450 V
MPP voltage range	60 V to 450 V
Rated input voltage	360 V
Min. input voltage / initial input voltage	60 V / 80 V
Max. input current (MPP / total)	18 A / 30 A
Maximum short circuit current (MPP)	25 A
	2 / A:2; B:2
Number of independent MPP inputs / strings per MPP input	Z / A.Z, D.Z
Output (AC)	
Rated output	5500 W (power factor 0.95) 5500 W (power factor 1.0)
Max. apparent power AC	5790 VA
Rated output voltage	202 V
Rated power frequency / rated grid voltage	50 Hz, 60 Hz
Max. output current	28.7 A
Power factor at rated output	0.95 underexcited
Adjustable displacement power factor	1.0 to 0.8 underexcited
Main circuit system	Single phase 2 wire (3 wire connection system)
Efficiency	
Max. efficiency / JIS Efficiency	96.8% / 96.2%
Protective devices	
Input-side disconnection point	•
Ground fault monitoring / grid monitoring	• / •
DC reverse polarity protection / AC short circuit current capability / galvanically isolated	•/•/-
All-pole-sensitive residual-current monitoring unit	•
Protection class (as per IEC 62103) / overvoltage category (according to IEC 60664-1)	1/11
General data	1/ 11
Dimensions (W / H / D)	435 mm / 470 mm / 176 mm
Weight	433 min / 470 min / 170 min max. 18 kg
	Temperature (-25 ° C to + 60 ° C), humidity range (0% to 100%), indoor
Operating environment condition	outdoor
Noise emission, typical	< 30 dB(A)
Self-consumption (at night)	5.0 W / 28 VA (50 Hz), 38 VA (60 Hz)
Inverter type	Voltage type current control system
Topology	Transformerless
Cooling method	Convection
Degree of protection (as per IEC 60529)	IP65
Climatic category (as per IEC 60721-3-4)	4K4H
Max. permissible value for relative humidity (non-condensing)	100%, condensing
	100%, condensing
Equipment	
DC connection / AC connection	SUNCLIX / AC connector
Display via smartphone, tablet, laptop	•
Interfaces: WLAN / Ethernet x2	•/•
Communication method	Speedwire Modbus
Warranty	10 years and 5 years extra warranty by Sunny Portal registration
JET Certificates and approvals	MP-0191, Anti islanding acc. to JEM 1498 (2019)
Country availability of SMA Smart Connect	JP
Standard features Optional features – Not available	
 Standard features Optional features – Not available Data at nominal conditions Status: 01/2021 	



BASIC SYSTEM functions

- Easy commissioning via integrated WLAN and Speedwire interface
- Maximum transparency thanks to visualization in the Sunny Portal
- Safe investment through SMA Smart Connect

EXPANDED SYSTEM functions

• Easy integration of the Power Curtailment Box

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