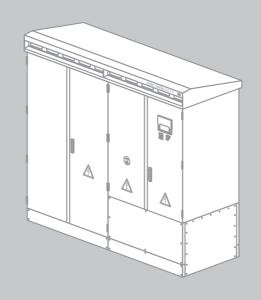


Technical Information

Important Information on Transportation and Installation for SUNNY CENTRAL 500CP-JP/500CP XT/630CP XT/ 720CP XT/760CP XT/800CP XT/850CP XT/900CP XT



Contents

With their compact and weatherproof enclosure, the Sunny Central inverters of the CP XT production series are easy to load and transport and can be installed almost anywhere.

The new generation of Sunny Central CP XT inverters is now available in additional power classes - the Sunny Central 850CP XT with a maximum power output of 935 kVA and the Sunny Central 900CP XT with a maximum power output of 990 kVA.

The newly designed communication with the Sunny Central Communication Controller (SC-COM) makes it possible to set up two separate networks in the PV plant: one monitoring network and one control network.

With the new-generation Sunny Central CP XT, you can also equip the inverter with an external fast-stop function.

This document describes the most important installation and transport requirements. It also summarises the aspects to be taken into consideration for plant planning with Sunny Central 500CP-JP/500CP XT/630CP XT/720CP XT/760CP XT/ 800CP XT/850CP XT/900CP XT.

1 Sunny Central

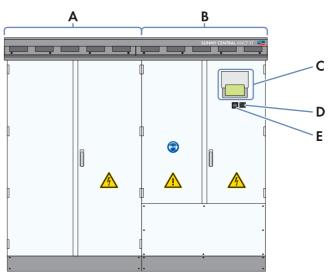


Figure 1: Sunny Central with touch display (example)

Position	Description	Description
А	Inverter cabinet	The inverter cabinet contains the inverter bridge.
В	Interface cabinet	All AC, DC and data cables are connected in the interface cabinet. The interface cabinet contains:
		 Touch display
		 Start/Stop switch
		 Optional communication devices
С	Touch display	_
D	Service interface	A laptop can be connected to the service interface via an Ethernet cable. This enables e.g. warnings and error messages to be read out.
E	Key switch	-

2 Mechanical Data for Outdoor Installation

2.1 **Sunny Central**

Width	Height	Depth	Weight
2,562 mm	2,272 mm	956 mm*	1,900 kg

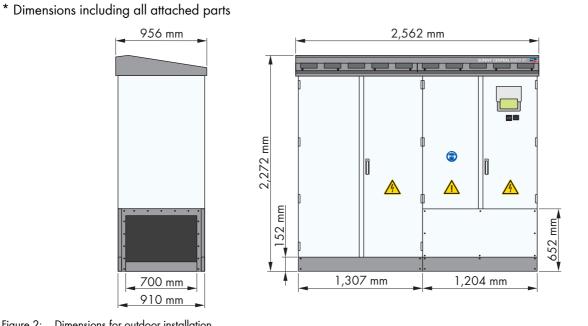
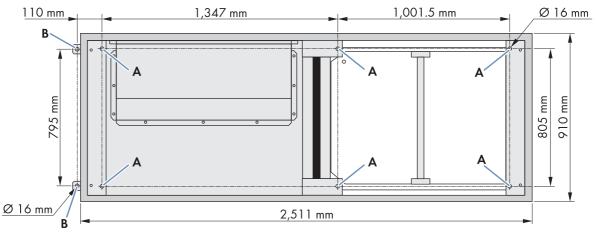


Figure 2: Dimensions for outdoor installation



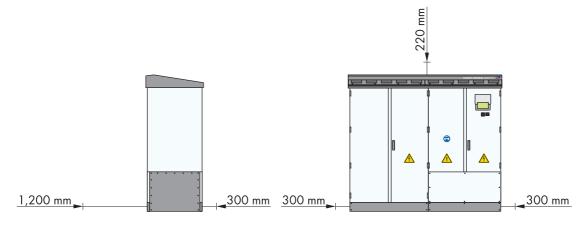


Position	Description
А	Mounting holes for installation on a base from SMA Solar Technology AG
В	Additional mounting holes for installation on building ground, e.g. a foundation

2.2 Minimum Clearances

Observe the following minimum clearances to ensure trouble-free operation of the Sunny Central.

Minimum Clearances for One Sunny Central





Minimum Clearances between Two Sunny Central Inverters and Transformer

Option 1

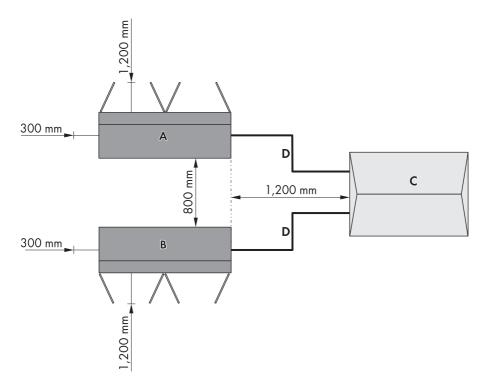


Figure 5:	Minimum clearances	for two Sunny C	entral inverters wit	h MV transformer - Option 1

Position	Description
A	Sunny Central 1
В	Sunny Central 2
С	MV transformer and medium-voltage switchgear
D	Cable route between Sunny Central and MV transformer

Option 2

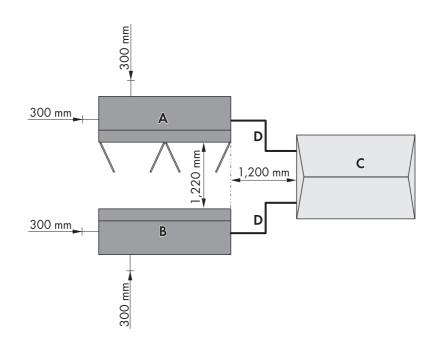


Figure 6: Minimum clearances for two Sunny Central inverters with MV transformer - Option 2

Position	Description
А	Sunny Central 1
В	Sunny Central 2
С	MV transformer and medium-voltage switchgear
D	Cable route between Sunny Central and MV transformer

Recommended Clearances for the Facilitation of Service Work

In order to facilitate service work, SMA Solar Technology AG recommends minimum clearances of 1,000 mm at the rear and sides. If you are using the service tent from SMA Technology AG during installation and service work, maintain a distance of 5,000 mm to the inverter.

3 Transport

The Sunny Central comprises a compact enclosure which can be transported with either a long pallet truck, a forklift truck, or a crane fork. Transport with a crane equipped with a suitable harness is also possible. Note that the selected means of transportation must be suitable for the weight of the Sunny Central of 1,900 kg. In the delivery condition, the panels in the base area are dismantled so that the Sunny Central can be transported immediately. The stable frame construction enables it to also be transported without the use of wooden pallets. In the standard scope of delivery, the inverter is delivered on a wooden pallet in an upright position. Therefore, a truck with a maximum overall height of 4 m is adequate for transport.

• Centre of gravity marking

The symbol to the right indicates the centre of gravity of the Sunny Central. It is to be found on the packaging and on the inverter. The centre of gravity is not in the middle of the Sunny Central.

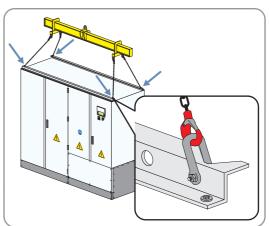


• Crane

The stable enclosure of the Sunny Central with its reinforced frame allows for simple transportation with a crane. The diameter of the holes in the roof railing for attaching the shackles is 40 mm.

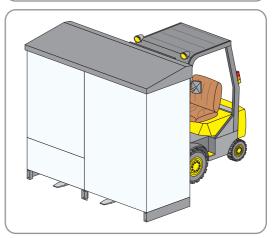
You must remove the roof to reach the attachment points of the shackles. Refer to the installation manual for information on the dismantling procedure.

For the station installation option, the Sunny Central is designed without a roof.



• Forklift truck

You can lift and transport the Sunny Central from the front or the rear using a forklift truck.



• Long pallet truck

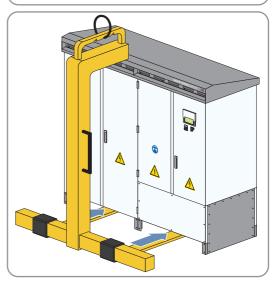
You can lift and transport the Sunny Central using a long pallet truck.

If the Sunny Central is being transported on a wooden pallet, the Sunny Central can be raised from either narrow side of the pallet.

If the Sunny Central is being transported without a wooden pallet, the pallet truck must be driven underneath the inverter cabinet. Make sure not to damage the side panels of the Sunny Central.



You can lift and transport the Sunny Central from the front or rear using a crane fork.



4 At the Mounting Location

4.1 Air Supply and Exhaust Air

The innovative OptiCool cooling concept makes it possible to operate inverters at full nominal power at ambient temperatures of up to +50°C. At temperatures between +50°C and +62°C, the inverter continues feeding in but reduces its feed-in power depending on the temperature to protect the inverter. At a temperature of +55°C, the inverter still feeds in at 50% of its nominal power.

With the "Low-temperature option", the operating temperature range is expanded to -40° C to $+62^{\circ}$ C; however, the inverter will only maintain feed-in operation down to -25° C. If the ambient temperature falls below -25° C, the inverter goes into the "Stop" operating state and the supplementary heating unit is activated. As soon as the ambient temperature reverts to exceeds -20° C, the inverter resumes feed-in operation.

The cooling air is drawn in through the inverter roof and blown out again through the slits at the back of the inverter.

The illustration on the right shows the principle of the air circulation inside the Sunny Central.

The Sunny Central requires 3,000 m³/h of fresh air, which is drawn in through the ventilation grids at the front. The fresh air must meet the 4S2 classification. You can install the Sunny Central in a chemically active environment. The inverter is protected against salt spray in accordance with EN 60721-3-4 Class 4C2 and can hence be operated near the coast. You will find the required air qualities in the following table.



Air Quality Classification for Mechanically Active Substances

Ambient conditions for stationary application	Class 4S2
a) Sand in air [mg/m ³]	300
b) Dust (suspended matter) [mg/m ³]	5.0
c) Dust (precipitation) [mg/m ³]	20
Mounting locations where appropriate measures are taken to keep dust levels to a minimum	х
Mounting locations where no special measures have been taken to reduce the sand or dust levels and which are not located in the vicinity of sand or dust source	

Air Quality Classification for Chemically Active Substances

Ambient conditions for stationary application	Class	s 4C2
	Mean value	Thres- hold
a) Sea salt		ence of spray
b) Sulfur dioxide [mg/m ³]	0.3	1.0
c) Hydrogen sulfide [mg/m ³]	0.1	0.5
d) Chlorine [mg/m ³]	0.1	0.3
e) Hydrogen chloride [mg/m ³]	0.1	0.5
f) Hydrogen fluoride [mg/m ³]	0.01	0.03

Ambient conditions for stationary application		Class 4C2	
	Mean value	Thres- hold	
g) Ammonia [mg/m ³]	1.0	3.0	
h) Ozone [mg/m ³]	0.05	0.1	
i) Nitrogen oxides [mg/m ³]	0.5	1.0	
Mounting locations in rural or densely populated areas with little industry and moderate traffic volume	2	x	
Mounting locations in densely populated areas with industry and high traffic volume	2	x	

Exhaust Air

The Sunny Central blows the exhaust air out through the openings in the base area of the inverter cabinet. The following illustration shows the dimensions of the exhaust air opening.

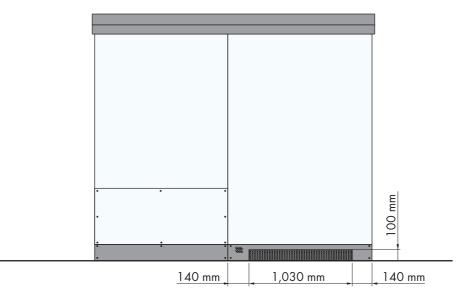


Figure 7: Exhaust vent dimensions

4.2 Base

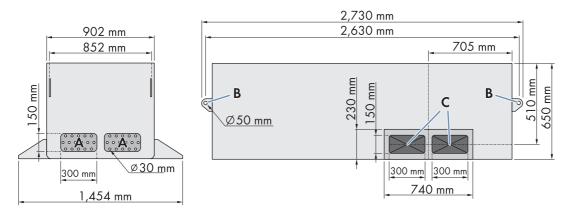
SMA Solar Technology AG offers prefabricated bases made of metal and concrete. These bases provide ideal support for the Sunny Central and facilitate the insertion of cables. The bases are embedded into the floor on site. The inverter is mounted directly onto the base.

The bases are designed for use in wind load area 4. Accordingly, there are lateral extensions at the bottom to increase the stability of the base.

Below, you will find illustrations of a metal base and a concrete base including dimensions* :

Metal Base Dimensions

The metal base weighs 330 kg.



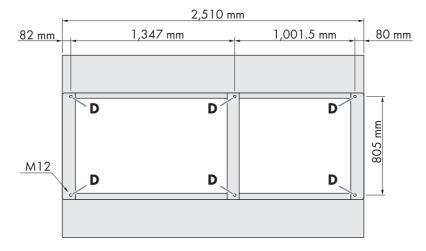


Figure 8: Dimensions of the metal base

Position	Description
A	Entry for data cables
В	Transport lugs
С	Entry for DC and AC cables
D	Mounting holes for the inverter

^{*} The specified dimensions for the bases may deviate slightly. We would be happy to send you the latest base construction drawings.

Dimensions of the Concrete Base*

The concrete base weighs 2,360 kg.

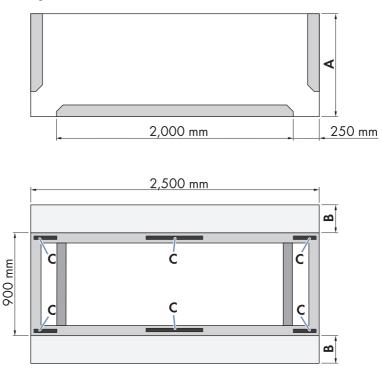


Figure 9: Dimensions of the concrete base

Position	Description
А	Height: 620 mm to 900 mm
В	Width of the foundation extension: 0 mm to 300 mm
С	Anchoring points for the inverter

4.3 Building Ground Properties

Excavation Pit and Subgrade Requirements

If you are using a base from SMA Solar Technology AG, you must prepare the mounting location with a subgrade. The excavation pit must have the following properties:

- The excavation pit is excavated according to the height of the base.
- Working area of at least 500 mm around the subgrade is available.
- The corners of the excavation pit are clearly marked.
- Dump excavated material away from access routes so that the truck is not hindered during transport.

The subgrade must have the following properties:

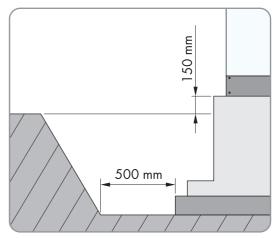
- The subgrade must be made of stone-free, compactable material without sharp edges, e.g. a horizontal lean concrete plate.
- The subgrade must have a compression ratio of 98%.
- The base compression must be 150 kN/m².
- The unevenness must be less than 0.25% (according to DIN 18202: Table 3, line 4).

^{*} The specified dimensions for the bases may deviate slightly. We would be happy to send you the latest base construction drawings.

• The subgrade must have the following minimum dimensions:

Position	Description
Width	2,600 mm
Depth	1,000 mm + double foundation extension (0 mm to 300 mm)
Height	150 mm

- The subgrade must be prepared in such way that after installation, the base is positioned about 150 mm above ground level. This will ensure that the Sunny Central is protected against high water levels after heavy rain or a snow thaw.
- If there is to be paving up to the inverter, a gap of 30 mm between the inverter and the paved area must be maintained.



Foundation Requirements

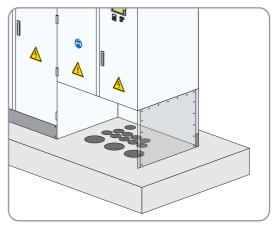
If you are not using a base from SMA Solar Technology AG, you can also position the Sunny Central on a foundation. The foundation must have the following properties:

- The foundation must be suitable for the weight of the inverter of 1,900 kg.
- The unevenness must be less than 0.25% (according to DIN 18202: Table 3, line 4).
- The inclination of the foundation must not exceed 1%. This allows rain water to drain from underneath the Sunny Central.
- The foundation must have the following minimum dimensions:

Position	Description
Width	2,600 mm
Depth	1,000 mm

- Take the enclosure openings in the foundation into account.
- For convenient operation and trouble-free maintenance, SMA Solar Technology AG recommends widening the foundation for the inverter by 400 mm on each side or providing a level, reinforced surface. The foundation must have the following minimum dimensions:

Position	Description
Width	3,400 mm
Depth	1,800 mm

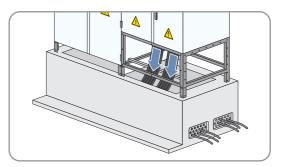


• If there is to be paving up to the foundation of the inverter, a gap of 30 mm between the foundation and the paved area must be maintained.

5 Electrical Connection

5.1 Enclosure Opening

The DC cables, AC cables and data cables can be inserted through the floor into the Sunny Central.



5.2 Connection Requirements

DC Connection

DC Fuses Option

You can connect the DC strings or DC main cables from the DC sub-distribution, such as the Sunny String-Monitor, directly to the nine LV/HRC size 3 fuses in the Sunny Central via the copper lugs. The number of LV/HRC size 3 fuses available depends on the option.

The DC cables must be designed for the maximum PV voltage and must have double or reinforced insulation.

Terminal lug	Maximum cable cross-section	Maximum number of cables per input and potential (+ and –)
M12	400 mm ²	2

Apart from the terminal lugs, all materials needed for the screw connection of the AC connection and the DC connection are included in the scope of delivery of the inverter.

DC Fuses with SMB Connection Kit Option

With the SMB Connection Kit, you can connect the DC terminals from the DC distribution, such as the Sunny Main Box or the Sunny Main Box Cabinet, directly in the inverter. In each instance, three DC connection lugs are connected with the SMB Connection Kit. The inputs on the SMB Connection Kit are fused outside the inverter, for example in the DC distribution. In this case, use disconnecting blades instead of LV/HRC fuses.

With this connection option, you can connect a maximum of three DC distributions to one Sunny Central.

DC inputs per potential on the Sunny Central	Use of the Sunny Main Box or Sunny Main Box Cabinet*	Total number of DC inputs per potential
maximum 9	no	9
maximum 6	1 Sunny Main Box	14
maximum 3	2 Sunny Main Boxes	19
none	3 Sunny Main Boxes	24

* Maximum eight DC inputs per Sunny Main Box or Sunny Main Box Cabinet

The DC cables must be designed for the maximum PV voltage and must have double or reinforced insulation.

Terminal lug	Maximum cable cross-section	Maximum number of cables per input and potential (+ and –)
M12	400 mm ²	2

Apart from the terminal lugs, all materials needed for the screw connection of the AC connection and the DC connection are included in the scope of delivery of the inverter.

DC Busbar Option

You can connect the DC connections from the DC distribution, such as the Sunny Main Box or the Sunny Main Box Cabinet, directly to the DC busbars in the inverter. The inputs are fused outside of the inverter, for example in the DC distribution.

The DC cables must be designed for the maximum PV voltage and must have double or reinforced insulation.

Terminal lug	Maximum cable cross-section	Maximum number of cables per input and potential (+ and –)
M12	400 mm ²	2

Apart from the terminal lugs, all materials needed for the screw connection of the AC connection and the DC connection are included in the scope of delivery of the inverter.

Optiprotect Option

You can connect the DC strings or DC main cables directly to the inverter using tin-plated DC terminals. The fusing takes place via 16 motor-driven circuit breakers (depending on the option) that replace the LV/HRC fuses and the central switch-disconnector.

Aluminium cables can be directly connected without any further provisions.

The number of terminals available depends on the option ordered.

In the case of option 32/16 and 24/12, 2 DC connections are connected in parallel from each switch. Both – potentials are connected via a joint terminal to each switch.

Option	Terminals per + potential	Terminals per – potential
32/16	32 terminals for cable cross-section of 25 mm ² to 120 mm ²	16 terminals for two cables each with a cable cross-section of 25 mm ² to 120 mm ²
24/12	24 terminals for cable cross-section of 25 mm ² to 120 mm ²	12 terminals for two cables each with a cable cross-section of 25 mm ² to 120 mm ²
16/16	16 terminals for cable cross-section of 25 mm ² to 240 mm ²	16 terminals for cable cross-section of 25 mm ² to 240 mm ²
12/12	Twelve terminals for cable cross-section of 25 mm ² to 240 mm ²	12 terminals for cable cross-section of 25 mm ² to 240 mm ²

Apart from the terminal lugs, all materials needed for the screw connection of the AC connection and the DC connection are included in the scope of delivery of the inverter.

AC Connection

Terminal lug	Maximum cable cross-section	Maximum number of cables per phase conductor
M12	300 mm^2	4

If AC cables with the cable cross-section $3 \times 240 \text{ mm}^2$ are installed and the inverter is being operated at outside temperatures of over +45 °C, temperatures of up to +95 °C may arise at the busbars in the connection area. In order to preserve the cable ampacity at such temperatures, the AC cables must be fitted with ring terminal lugs and must be designed for operation at such high temperatures. SMA Solar Technology AG recommends the use of cable sets supplied by SMA. These are designed for temperatures up to +100 °C.

Earthing Concept

According to the latest technology, residual currents occurring in the inverter are discharged to earth. As a result, leakage currents to earth occur which must be taken into account when planning the PV plant. The magnitude and distribution of such leakage currents is influenced by the earthing concept of all components in the PV plant. Therefore, e.g. when using cameras and monitoring equipment, SMA Solar Technology AG recommends using fibre-optic technology for the transmission of signals. This will counteract possible interference sources.

SMA Solar Technology AG recommends earthing inverters and MV transformers in meshed design to reduce leakage current levels.

Furthermore, it is recommended to execute cabling between inverter and transformer directly on an earth strap. This will further reduce electromagnetic influences.

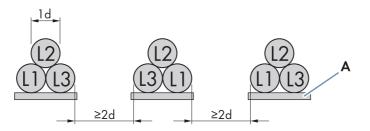


Figure 10: Cable routing on an earth strap

Position	Description
А	Earth strap

Sunny String-Monitor

The Sunny String-Monitor allows for simple and efficient string current monitoring. This way, faults such as string failures can be easily recognised. The Sunny Central then displays the corresponding fault. To connect the Sunny String-Monitor, use a cable of type Li2YCYc (TP) with a cable cross-section of $4 \times 2 \times 0.5 \text{ mm}^2$.

If the string current monitoring takes place using the Optiprotect option, no Sunny String-Monitors are required.

Communication

You can integrate your Sunny Central into the network environment via the Sunny Central Communication Controller (SC-COM). If you connect the SC-COM permanently to a network with Internet access, it will be able to transmit plant data to Sunny Portal automatically.

The various tasks performed by the SC-COM can be organised in two separate networks:

- Monitoring network: for monitoring, parameterisation and remote diagnosis of the inverter.
- **Control network**: the Power Plant Controller is able to transmit grid management instructions from the network operator to the inverters via this network. The Power Plant Controller is an intelligent park control system for large-scale PV power plants. The control network is used exclusively for grid management specifications which need to be transmitted and implemented within a required period of time. If only a low data transfer rate is required for monitoring, the network operator instructions can also be transmitted via the monitoring network. In this case, only one network is necessary.

It is also possible to integrate the SC-COM into the network environment by means of an Ethernet cable. The Ethernet cable must have the following properties:

- The cable must not exceed a maximum length of 100 m.
- The cable must be shielded and pair-twisted.
- The cable must be of at least category 5 (CAT 5).

Another connection possibility is a direct optical fibre link. For this option, there is an integrated splice box in the Sunny Central. The splice box features an SC-P plug to which the optical fibre can be directly connected. This guarantees the connection of the optical fibre to the inverter.

Another option for connecting the optical fibre to the splice box is an optical fibre pigtail. The optical fibre is spliced in the splice box with the corresponding optical fibre pigtail. The optical fibre pigtail plug is connected to the SC-P plug in the splice box. The optical fibre pigtail must have the following properties:

- The cable is equipped with a 50 µm multi-mode optical fibre.
- The cable has an SC plug.

The optical fibre pigtail is not included in the scope of delivery.

External Setpoint

As a rule, the network operator sets external setpoints for reactive and active power. These are transmitted via a radio ripple control receiver, for example. The Power Reducer Box receives the target values from the radio ripple control receiver and sends these to the Sunny Central via the SC-COM. The Sunny Central applies the specifications of the network operator and feeds, for example, a specified reactive power into the electricity grid. Ask your network operator which signal transmission is used.

If the target values are not transmitted via the SC-COM and the Power Reducer Box, there are terminals in the Sunny Central to connect external setpoints. The Sunny Central processes standard signals from 4 mA to 20 mA. The Sunny Central has two terminals for the reactive power target value specification and two terminals for the active power target value specification with a grip range from 0.08 mm to 4 mm. The connection for the external setpoints must be made with a shielded cable.

Remote Shutdown

By means of remote shutdown, you can selectively shut down and switch off the Sunny Central within approximately six seconds, for example, from a control room. The function of the remote shutdown unit is similar to the stop position of the key switch. The Sunny Central has two terminals with a grip range from 0.08 mm to 4 mm for the connection of the remote shutdown unit. The remote shutdown unit can be connected to an external 24 V supply, or alternatively, the internal 24 V supply of the fast-stop function can be used. The remote shutdown must be connected via a shielded cable.

External Fast Stop

You have the option of connecting an external fast-stop function to the inverter. The external fast-stop function disconnects the inverter from the electricity grid in under 100 ms.

The Sunny Central has two terminals with a grip range from 0.08 mm to 4 mm for the connection of the external fast-stop function.

Options for configuring the external fast stop:

• External fast stop is deactivated

The terminals of the active fast stop are bridged. The fast stop function is thus deactivated. You will need to bridge the terminals as necessary.

• External fast stop is operated with internal 24 V supply

An external latching switch (break contact) is connected to the inverter terminals via the internal voltage supply in the inverter. When the switch is closed, an internal relay is energised and the inverter feeds into the grid. If the fast stop function is triggered, the switch opens and the relay is deactivated. The inverter is stopped and no longer feeds energy into the grid.

With a conductor cross-section of 2.5 mm², the maximum permissible conductor length is 130 m, and with a conductor cross-section of 1.5 mm², the maximum permissible conductor length is 80 m.

• External fast stop is operated with external 24 V supply

An external latching switch (break contact) is connected to the inverter terminals via an external 24 V voltage supply. When the switch is closed, an internal relay is energised and the inverter feeds into the grid. If the fast stop function is triggered, the switch opens and the relay is deactivated. The inverter is stopped and no longer feeds energy into the grid.

To use the external fast-stop function, an external 24 V power supply buffered for three to five seconds must be available.

The external fast-stop function must be connected in accordance with the circuit diagram. The external fast-stop function must be connected via a shielded cable.

Transformer Protection

The Sunny Central is equipped with a transformer monitoring system which switches the Sunny Central off immediately in case of failure. The Sunny Central has two terminals with a grip range of 0.08 mm to 4 mm for the connection of the transformer monitoring system. To use the transformer monitoring, an external voltage supply of 230 V/50 Hz must be provided. The transformer monitoring must be connected via a shielded cable.

External Supply Voltage

The Sunny Central draws the necessary energy for its internal power supply from the electricity grid. The Sunny Central can be connected to an external 230 V/400 V (3/N/PE) supply voltage. The self-consumption is distributed asymmetrically over the three phase conductors and has a maximum value of 1,900 W. The connection of the neutral conductor is compulsory, since there are both three-phase and single-phase loads installed in the inverter. The Sunny Central has five terminals with a grip range from 0.08 mm to 4 mm for the connection of the external supply voltage.

Insulation Monitoring

In order to ensure personal and plant safety in an insulated, and hence non-earthed PV plant, the state of the insulation is monitored. If the Sunny Central is equipped with insulation monitoring, the insulation resistance is calculated continuously in an active measurement procedure. Additional insulation monitoring is not necessary. Several insulation measurement devices in one system would interfere with one another and would distort the measurement results.

6 Conditions for Commissioning

In order to commission the Sunny Central, the following conditions must be met:

- Medium-voltage cables are back-filled with sand.
- AC and DC voltages are available.
- An area of 3,000 mm x 3,000 mm in front of the Sunny Central is reinforced.
- The kick plates are mounted on the Sunny Central.

7 Sunny Central for Station Installation

7.1 Modifications to the Station Installation Option

The Sunny Central CP XT for station installation is designed without a rain roof. Instead, on the top of the Sunny Central there are protection grids for air intake. This prevents coarse dust and impurities being drawn into the inverter. When closed, the enclosure of the Sunny Central complies with degree of protection IP21.

In order to comply with escape route requirements even in confined MV stations or electrical equipment rooms, the doors in this option are supplied without door stops. This means that the doors can also be opened at a wider angle than 90°.

7.2 Mechanical Data

Width	Height	Depth	Weight
2,511 mm	2,204 mm	928 mm*	1,900 kg

* Dimensions including all attached parts

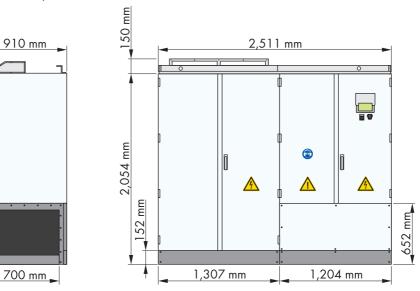


Figure 11: Dimensions for station installation

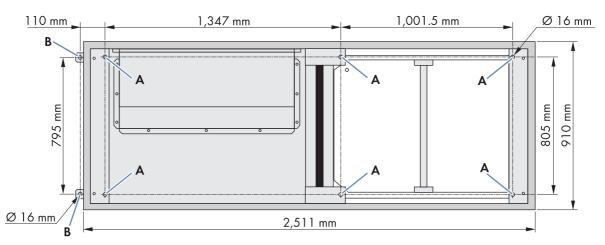


Figure 12: Dimensions of anchoring

Position	Description
А	Mounting holes for installation on a base from SMA Solar Technology AG
В	Additional mounting holes for installation on building ground e.g. a foundation

7.3 Minimum Clearances

Observe the following minimum clearances to ensure trouble-free operation of the Sunny Central. In order to facilitate service work, SMA Solar Technology AG recommends a minimum clearance of 300 mm at the top.

Minimum Clearances for Sunny Central Inverters in an MV Station

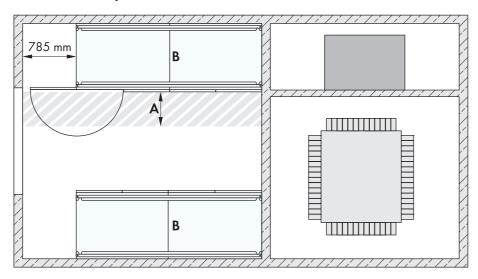


Figure 13: Minimum clearances for Sunny Central inverters in an MV Station

Minimum Clearances for Sunny Central Inverters in Electrical Equipment Rooms

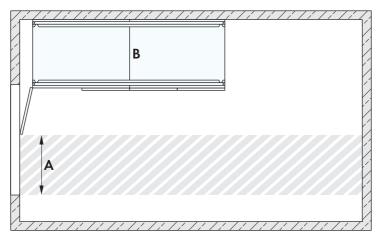


Figure 14: Minimum clearances for Sunny Central in electrical equipment rooms

Position	Description
А	Minimum passage width
	Maintain the minimum passage width between the open door of the Sunny Central and the next fixed obstacle. The minimum passage width must comply with national standards. In Germany, the minimum passage width is 500 mm.
В	Inverter

7.4 Transport

In principle, the Sunny Central for station installation is transported like the Sunny Central for outdoor installation. When a crane is used for transport, it is not necessary to remove the roof.

Air Pressure Drops 7.5

If the Sunny Central is installed in an MV station or an electrical equipment room, ensure that the maximum pressure drop limits for intake and exhaust air are not exceeded.

Make sure that all the air exhausted from the inverter is ducted out.		
Pressure drop for air intake	Pressure drop for air exhaust	Air volume
45 Pa	25 Pa	3,000 m ³ /h