

# MULTICLUSTER 12 FOR SUNNY ISLAND

Easy creation of powerful on- and off-grid applications



SMA Multicluster Sunny Island

Proven technology with new application areas for PV systems – the **SMA Multicluster System 12** is now suitable for operation on the utility grid as well. In Germany, it complies with the applicable conditions for connection to the low-voltage grid of VDE-ARN 4105: With the battery inverters Sunny Island 6.0H or 8.0H and the NA-Box 12, commercial self-consumption and batterybackup systems of up to 100 kWp can be set up. On an international scale, the Grid-Connect-Box 12 can be used to form self-consumption and battery-backup systems with an output of up to 138 kWp. The new Multicluster-Box 12 is suitable for TN- and TT-grids thanks to the integrated grounding contactor. In areas with very unstable utility grids, a diesel generator can also be connected. For off-grid regions, the Multicluster-Box 12 allows powerful solar off-grid systems with up to 138 kWp to be set up – ideal for commercial enterprises and village power supplies in rural regions.

## Flexible

- For off-grid, on-grid and back-up applications
- For power range of 30 to 138 kW
- For TN- and TT-grids

## Easy to use

- Integrated AC distribution for Sunny Island, generator, PV and loads (MC-Box 12)
- Retrofittable grid connection (NA-Box 12, Grid-Connect-Box12)
- Better serviceability

## Safe and reliable

- Fulfills German VDE-AR-N 4105
- Integrated residual-current device
- Active anti-islanding

## SPECIFICATIONS

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### Multicluste- r-Box 12

#### Load connection

Number of connections	1 x three-phase
Rated power	138 kW
Rated grid voltage	230 V / 400 V
AC voltage range	172,5 V - 265 V 300 - 433 V
Current at rated values	3 x 200 A
Terminals for connection N, L1, L2, L3	Spring-cage terminals
Fuse / maximum permissible fuse sizes	NH1 / 200 A

#### Sunny Island connections

Maximum number of devices	12
Ac rated power / AC current at rated values	72 kW / 12 x 26 A
Rated operating voltage	230 V / 400 V
Terminal for connection N, PE, L	Spring-cage terminals
Fuse	12 x circuit breaker C40 A

#### Generator Connection

Number of connections	1 x three-phase
Rated grid input power	138 kW
Nominal Voltage	230 V / 400 V
AC input current	3 x 200 A
Terminals for connection N, PE, L1, L2, L3	Spring-cage terminals
Fuse / maximum permissible fuse sizes	NH1 / 200 A

#### PV System connection

Number of connection	1 x three-phase
Rated power	138 kW
Rated operating voltage	230 V / 400 V
AC current at rated values	3 x 200 A
Terminals for connection N, PE, L1, L2, L3	Spring-cage terminals
Maximum permissible back-up fuse	200 A

#### NA-Box / Grid-Connect-Box connection

Number of connections	1 x three-phase
Rated input power	138 kW

Rated operating voltage	230 V / 400 V
Rated current / AC input current	3 x 200 A
Terminals for connection N, PE, L1, L2, L3	Spring-cage terminals
Maximum permissible back-up fuse	200 A
<b>General Data</b>	
Number of phases	3
Permitted grid configuration	TN-S, TN-C S y TT
Rated frequency / frequency range	50 Hz / 45 ... 65 Hz.
Dimensions ( W x H x D )	1200 x 1600 x 435 mm
Weight	200 Kg
Maximum operating altitude above mean sea level	3000 m
Degree of protection according to IEC 60529	IP55
EMC environment, interference / interference immunity	B / A
Humidity	0 ... 100 %
Operating temperature range	-25 °C ... +60 °C
Output power / rated power at 25 °C	138 kW
Output power / rated power between 25 and 60 °C	See "Derating Behavior" diagram
Data cables	Yes
Warranty	5 years

## DOWNLOADS



SMA Sunny Island  
SI30M-44M  
Specifications  
(472.25 KiB)



SMA Sunny Island  
6.0H-8.0H  
Specifications  
(538.31 KiB)



SMA Multiclust<sup>er</sup> 12  
for Sunny Island  
(287.46 KiB)



Sunny Boy 1.5 - 2.5  
(460.64 KiB)



Sunny Boy Storage  
SB25 (452.79 KiB)



Sunny Boy Smart  
Energy (353.33 KiB)