

# MULTICLUSTER 12 FOR SUNNY ISLAND

Easy creation of powerful on- and off-grid applications



SMA Multiclustery Sunny Island

Proven technology with new application areas for PV systems – the **SMA Multiclustery 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 Multiclustery-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 Multiclustery-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

Multiclusetr-Box 12	
<b>Load connection</b>	
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
<b>Sunny Island connections</b>	
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 braker C40 A
<b>Generator Connection</b>	
Number of connections	1 x trhee-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-case terminals
Fuse / maximum permissible fuse sizes	NH1 / 200 A
<b>PV System connection</b>	
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
<b>NA-Box / Grid-Connect-Box connection</b>	
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

## SUNNY ISLAND, LI-ION APPROVED BATTERIES

 [SI-Lilon-TI-en-45.pdf](#) Size: 425.26 KiB

 [SI44M\\_60H\\_80H-DEN1931-V20.pdf](#) Size: 536.35 KiB

## SMA MULTICLUSTER 12 FOR SUNNY ISLAND

 [SMA Multicluseter 12 EN.pdf](#) Size: 287.46 KiB