



StecaGrid 2000+

2,000 W up
to several 10,000 W

The DualString product range consists of masters and slaves. Like the slaves, the master includes an inverter, but it also provides additional functions: a four-line display, a data logger for storing the yield values, country-specific grid monitoring of the alternating current output, and optional use of an interface card.

Flexible system design

The StecaGrid 2000+ uses the DualString concept. This means that every inverter (master or slave) has two inputs, with each input having its own MPP tracker. One module string can be connected to each input. If required, the inputs can also be connected in parallel.

The advantage of such a system is the low sensitivity to negative influences such as (e.g.) partial shadowing, functional faults, or the dropout of a string. The use of several decentralised master-slave combinations reduces the cost of DC cabling, and minimises electrical losses.

Galvanic isolation

DualString inverters from Steca are equipped with a high-frequency transformer, and are thus galvanically isolated. This enables unrestricted use of thin-film modules. Nevertheless, high efficiency of up to 95 % is achieved.

Diverse application situations

StecaGrid inverters offer constant high-power capability over a wide range of ambient temperatures. This is supported by maintenance-free, natural convection via the large-dimension cooling fins. Since no fans are used, the inverters work in virtual silence. Thanks to the high degree of protection, StecaGrid DualString inverters are also suitable for outdoor installation.

StecaGrid 2000+ D Master and StecaGrid 2000+ Master can be combined with StecaGrid 1900 Slave and StecaGrid 2010+ Slave.

Product features

- Two Maximum Power Point Trackers (MPP tracker) per device
- Flexible and expandable
- High efficiency
- DualString concept
- Low weight
- Simple installation
- Master-slave concept
- Suitable for outdoor installation
- Fanless and maintenance-free
- Integrated data logger
- Wall-mounting with steel wall bracket for very easy installation

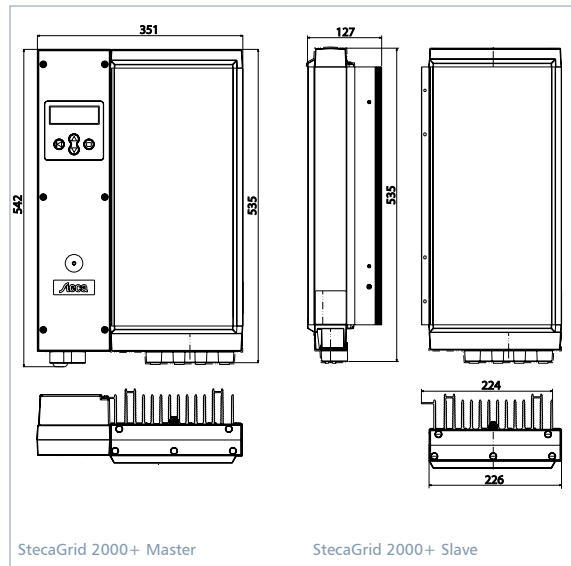
Electronic protection functions

- Integrated temperature monitoring with output derating



StecaGrid 2000+ Master

StecaGrid 2000+ Slave



StecaGrid 2000+ Master

StecaGrid 2000+ Slave

Displays

- Text LCD display
 - for current output, energy yields, operating parameters, date, time, service information
- Multi-coloured LED shows operating states

Operation

- Multilingual menu navigation
- Four cursor buttons for menu selection

Options

- Type with 230 V / 60 Hz

[areas of application]





| | StecaGrid 2000+ D Master | StecaGrid 2000+ Master | StecaGrid 2000+ Slave |
|--|---|------------------------|-----------------------|
| DC input side (PV-generator) | | | |
| Maximum start voltage | 410 V | | |
| Maximum input voltage | 450 V (higher voltages can damage the device) | | |
| Minimum input voltage | 80 V | | |
| Minimum input voltage for rated output | 132 V | | |
| MPP voltage | 80 V ... 400 V | | |
| Maximum input current | 2 x 8 A [current limited by inverter] or 1 x 16 A [parallel inputs] | | |
| Maximum input power | 1,075 W [per input] or 2,150 W [2 parallel inputs] | | |
| Maximum recommended PV power | 2,400 Wp | | |
| Derating / limiting | automatic when - input power is higher (> 1,075 W / input) - the device is not cooled sufficiently - input currents > 2 x 8 A or 1 x 16 A (parallel inputs) (higher currents are limited by the equipment and therefore will not damage the inverter) | | |
| AC output side (Grid connection) | | | |
| Grid voltage | 190 V ... 265 V [depending on regional settings] | | |
| Rated grid voltage | 230 V | | |
| Maximum output current | 10 A | | |
| Maximum output power | 2,000 W | | |
| Rated power | 2,000 W | | |
| Rated frequency | 50 Hz, optional 60 Hz | | |
| Frequency | 47.5 Hz ... 52 Hz [depending on regional settings] | | |
| Night-time power loss | 1.3 W | 1.0 W | 0 W |
| Feeding phases | single-phase | | |
| Power factor | > 0.95 | | |
| Distortion factor | < 5 % (max. power) | | |
| Characterisation of the operating performance | | | |
| Maximum efficiency | 95 % | | |
| European efficiency | 93.3 % | | 93.5 % |
| MPP efficiency | > 99 % | | |
| Power derating at full power | from 40 °C (T _{amb}) | | |
| Switch-on power | 20 W | | |
| Standby power | 3 W | | |
| Safety | | | |
| Isolation principle | HF-transformer with galvanic separation and amplified isolation | | |
| Grid monitoring | MSD, compliant with DIN VDE 0126-1-1 | see table of countries | via master |
| Selectable parameter settings | Netherlands, Belgium, France, Spain, Great Britain, Germany (Type with 60 Hz: DOM-TOM, Costa Rica) | | via master |
| Operating conditions | | | |
| Area of application | indoor rooms with or without air conditioning, outdoors with or without protection | | |
| Ambient temperature | -25 °C ... +60 °C | | |
| Relative humidity | 0 % ... 95 % | | |
| Noise emission | < 32 dBA | | |
| Fitting and construction | | | |
| Degree of protection | IP 65 | | |
| DC Input side connection | MultiContact MC 4 | | |
| AC output side connection | WAGO 1.5 mm ² ... 10 mm ² (flexible) / 16 mm ² (solid) | | via master |
| Dimensions (X x Y x Z) | 351 x 542 x 140* mm | | 226 x 535 x 140* mm |
| Weight | approx. 11 kg | | approx. 9 kg |
| Communication interface | optional StecaGrid Connect with Ethernet interface | | |
| Integrated DC circuit breaker | no | | |
| Cooling principle | natural convection | | |
| Test certificate | certificate of compliance, CE mark, DK 5940, G83 | | |

*incl. mounting plate

StecaGrid 2000+: Master-slave combination



StecaGrid 2000+ Master and 2 StecaGrid 2000+ Slaves