



## 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 MasterSlave 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.

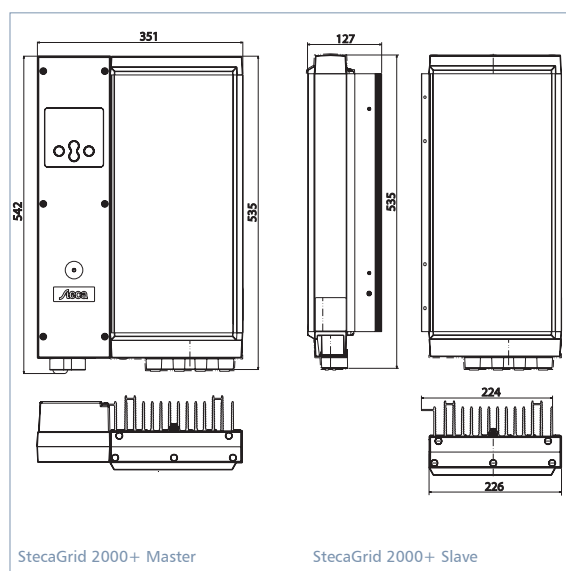
### Product features

- Two maximum power point trackers (MPP controllers) per device
- Flexible and expandable
- High efficiency
- DualString concept
- Low weight
- Simple installation
- MasterSlave concept
- Suitable for outdoor installation
- Fanless and maintenance-free
- Integrated data logger
- Wall-mounting with steel wall bracket for very easy installation



StecaGrid 2000+ Master

StecaGrid 2000+ Slave



StecaGrid 2000+ Master

StecaGrid 2000+ Slave

### Electronic protection functions

- Integrated temperature monitoring with output derating

### Display

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

### Operation

- Multilingual menu navigation
- Four cursor buttons for menu selection

	StecaGrid 2000+ D Master	StecaGrid 2000+ Master	StecaGrid 2000+ Slave
<b>DC input data</b>			
MPP voltage	80 V ... 400 V		
Maximum start voltage	410 V DC		
Maximum permissible input voltage	450 V DC (higher voltages can damage the device)		
Minimum input voltage for grid-feeding	80 V		
Minimum input voltage for rated output	132 V		
Maximum permissible input current	2 x 8 A DC (current limited by inverter) or 1 x 16 A DC (parallel inputs)		
Maximum input power	1,075 W (per input) or 2,150 W (2 parallel inputs)		
Derating / limiting	automatic when - input power is higher (> 1.075 kW/input) - the device is not cooled sufficiently - input currents > 2 x 8 A DC or 1 x 16 A (parallel inputs) (higher currents are limited by the equipment and therefore will not damage the inverter)		
<b>AC output data</b>			
Output voltage	190 V AC ... 265 V AC (depending on regional settings)		
Rated output voltage	230 V AC		
Maximum output current	10 A AC		
Maximum output power	2,000 W AC		
Rated output power	2,000 W AC		
Rated frequency	50 Hz		
Frequency	47,5 Hz ... 52 Hz (depending on regional settings)		
Feeding phases	single-phase		
Total harmonic distortion	< 5 % (at maximum output)		
<b>Operating behaviour</b>			
Maximum efficiency	95 %		
European efficiency	93.3 %		93.5 %
MPP efficiency	> 99 %		
Power derating at full power	from 40 °C (Tamb.)		
Switch-on power	20 W		
Standby power	3 W		
Inverter's own consumption (nighttime operation)	1.3 W	1.0 W	0 W
<b>Safety</b>			
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
<b>Application conditions</b>			
Area of application	indoor rooms with or without air conditioning, outdoors with or without protection		
Ambient temperature	-25 °C ... +60 °C		
Humidity	0 % ... 95 %		
Noise emissions in standard operating conditions	< 32 dBA		
<b>Equipment and design</b>			
Protection class	IP 65		
DC connection	MultiContact MC 4 (Solarline 2)		
AC connection	WAGO 2.5 - 6 mm <sup>2</sup>		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		
Display	display screen, LED		via master
DC circuit breaker	no		
Cooling principle	natural convection		
Test certificate	certificate of compliance, CE mark		

\*incl. mounting plate

## DC circuit breaker for StecaGrid 2000+

500 V DC, 16 A DC, 2-, 4-pole and 6-pole

Steca offers suitable DC circuit breakers especially designed for the StecaGrid 2000+ DualString inverters. Both a 2-, 4-pole and 6-pole circuit breaker are available.

### Certificates

- Compliant with DIN VDE 0100-712



4-pole DC circuit breaker



6-pole DC circuit breaker

DC circuit breaker DualString	2-pole	4-pole	6-pole
<b>DC input data</b>			
Max. permissible input voltage	450 V	600 V	
Max. permissible input current	16 A per contact		
<b>Application conditions</b>			
Area of application	indoor rooms with or without air conditioning, outdoors with or without protection		
Ambient temperature	-20 °C ... +55 °C	-20 °C ... +85 °C	
Humidity	0 % ... 95 %		
<b>Equipment and design</b>			
Protection class	IP 66	IP65	
DC connection	screw-type terminals		
Dimensions (X x Y x Z)	190 x 100 x 93 mm	180 x 182 x 165 mm	
Weight	0.6 kg	0.8 kg	1.0 kg
Test certificate	CE mark		

► Wiring information for the DC circuit breaker can be found on our website ([www.steca.com](http://www.steca.com)).