

StecaGrid 2000+ and StecaGrid 2010+

2,000 W up to several 10,000 W

This 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

Every inverter (Master or Slave) of the product range 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

The StecaGrid 2000+ and StecaGrid 2010+ inverters 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 inverters are also suitable for outdoor installation.

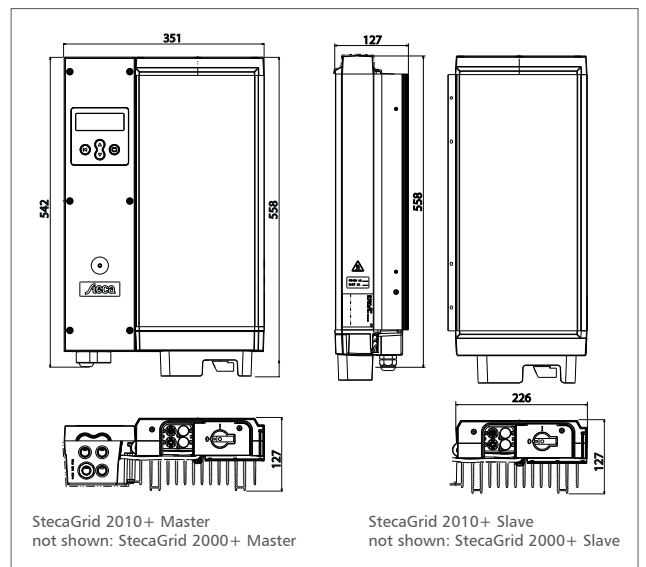
StecaGrid 2010+ with integrated DC circuit breaker

To reduce the installation time, the StecaGrid 2010+ inverter has an integrated DC circuit breaker. For safety reasons, the cable cover located above the DC connector can only be removed when the DC circuit breaker is switched off.



StecaGrid 2010+ Master
not shown: StecaGrid 2000+ Master

StecaGrid 2010+ Slave
not shown: StecaGrid 2000+ Slave



StecaGrid 2010+ Master
not shown: StecaGrid 2000+ Master

StecaGrid 2010+ Slave
not shown: StecaGrid 2000+ Slave

StecaGrid 2000+ and StecaGrid 2010+ (Master and Slaves) can be combined with each other.

Product features

- Two Maximum Power Point Trackers (MPP tracker) per device
- Flexible and expandable
- High efficiency
- Low weight
- Simple installation
- Master-slave concept
- Integrated DC circuit breaker (StecaGrid 2010+)
- Suitable for outdoor installation
- Fanless and maintenance-free
- Integrated data logger
- Wall-mounting with steel wall bracket for very easy installation

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

Data logger and Display

System monitoring for StecaGrid 2000+ and StecaGrid 2010+

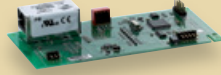
As standard, these inverters provide functions which enable complete integrated monitoring of the solar power system. The system's operating status (voltage, module output, grid frequency and grid voltage) and the energy yields of master and slaves are included. These measured values are shown on the display at all times.



System monitoring and accessories



DC circuit breaker



StecaGrid Connect
Network interface card



StecaGrid Connect User
User software

	StecaGrid 2000+ D Master	StecaGrid 2000+ Master	StecaGrid 2000+ Slave	StecaGrid 2010+ D Master	StecaGrid 2010+ Master	StecaGrid 2010+ 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 at maximum active power	1,075 W (per input) or 2,150 W (2 parallel inputs)					
Maximum recommended PV power	2,400 Wp					
Grounding	-			internal function grounding of the negative input for connecting amorphous and micromorphic thin-film modules		
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 active power (cos phi = 1)	2,000 W					
Rated power	2,000 W					
Rated frequency	50 Hz, optional 60 Hz			50 Hz		
Frequency	47.5 Hz ... 52 Hz (depending on regional settings)					
Night-time power loss	1.3 W	1.0 W	0 W	1.3 W	1.0 W	0 W
Feeding phases	single-phase					
Distortion factor (cos phi = 1)	< 5 % (max. power)					
Power factor cos phi	1					
Characterisation of the operating performance						
Maximum efficiency	95 %					
European efficiency	93.3 %		93.5 %	93.3 %		93.5 %
MPP efficiency	> 99 %					
Power derating at full power	from 40 °C (T _{amb})					
Standby power	3 W					
Safety						
Isolation principle	HF-transformer with galvanic separation and amplified isolation					
Grid monitoring	yes, integrated		via Master	yes, integrated		via Master
Selectable parameter settings	Netherlands, Belgium, France, Spain, Great Britain (Type with 60 Hz: DOM-TOM, Costa Rica)		via Master	Netherlands, Belgium, France, Spain, Great Britain		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					
Overvoltage category	III (AC), II (DC)					
DC Input side connection	MultiContact MC 4					
AC output side connection	WAGO terminal		via Master	WAGO terminal		via Master
Dimensions (X x Y x Z)	351 x 542 x 140* mm		226 x 535 x 140* mm	351 x 558 x 140* mm		226 x 558 x 140* mm
Weight	approx. 11 kg		approx. 9 kg	approx. 11 kg		approx. 9 kg
Communication interface	optional StecaGrid Connect with Ethernet interface					
Integrated DC circuit breaker	no			yes		
Cooling principle	natural convection					
Test certificate	certificate of compliance as per DIN VDE 0126-1-1, CE mark, DK 5940, G83	CE mark, DK 5940, G83		certificate of compliance as per DIN VDE 0126-1-1, CE mark, DK 5940, G83	CE mark, DK 5940, G83	

*incl. mounting plate

