



StecaGrid 2010+

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 2010+ 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.

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

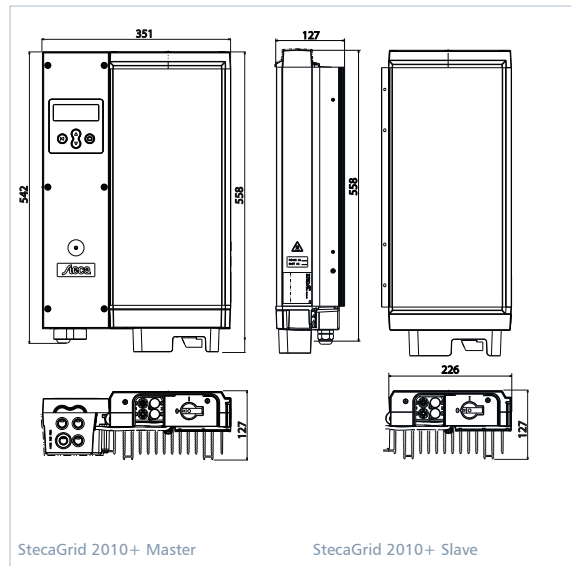
Product features

- 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



StecaGrid 2010+ Master

StecaGrid 2010+ Slave



StecaGrid 2010+ Master

StecaGrid 2010+ Slave

Electronic protection functions

- Integrated temperature monitoring with output derating

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

[areas of application]





	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	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		
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		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 558 x 140* mm		226 x 558 x 140* mm
Weight	approx. 11 kg		approx. 9 kg
Communication interface	optional StecaGrid Connect with Ethernet interface		
Integrated DC circuit breaker	yes, compliant with VDE 0100-712		
Cooling principle	natural convection		
Test certificate	certificate of compliance, CE mark		

*incl. mounting plate

StecaGrid 2010+: Master-slave combination



StecaGrid 2010+ Master and 2 StecaGrid 2010+ Slaves