



## StecaGrid 1900

1,840 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 1900 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 1900 D Master can be combined with StecaGrid 2000+ 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

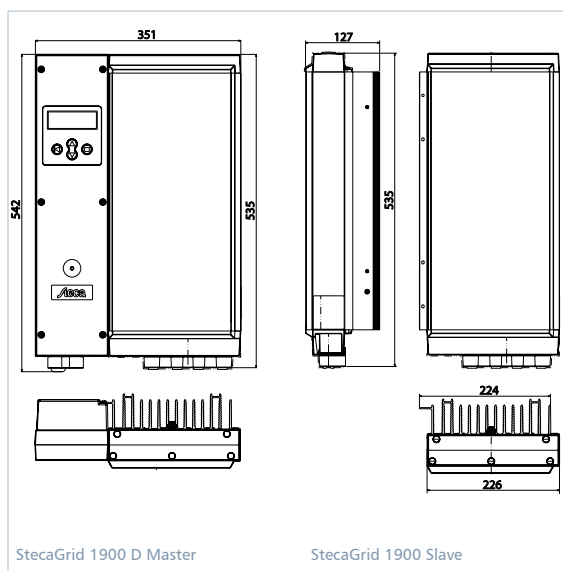
### Electronic protection functions

- Integrated temperature monitoring with output derating



StecaGrid 1900 D Master

StecaGrid 1900 Slave



StecaGrid 1900 D Master

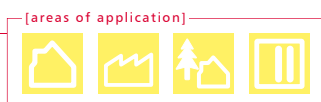
StecaGrid 1900 Slave

### 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





	StecaGrid 1900 D Master	StecaGrid 1900 Slave
<b>DC input side (PV-generator)</b>		
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	1,000 W [per input] or 2,000 W [2 parallel inputs]	
Maximum recommended PV power	2,200 Wp	
Derating / limiting	automatic when - input power is higher (> 1,000 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)	
<b>AC output side (Grid connection)</b>		
Grid voltage	190 V ... 265 V [depending on regional settings]	
Rated grid voltage	230 V	
Maximum output current	10 A	
Maximum output power	1,840 W	
Rated power	1,840 W	
Rated frequency	50 Hz	
Frequency	47.5 Hz ... 52 Hz [depending on regional settings]	
Night-time power loss	1.3 W	0 W
Feeding phases	single-phase	
Power factor	> 0.95	
Distortion factor	< 5 % (max. power)	
<b>Characterisation of the operating performance</b>		
Maximum efficiency	95 %	
European efficiency	93.3 %	93.5 %
MPP efficiency	> 99 %	
Power derating at full power	from 45 °C (T <sub>amb</sub> )	
Switch-on power	20 W	
Standby power	3 W	
<b>Safety</b>		
Isolation principle	HF-transformer with galvanic separation and amplified isolation	
Grid monitoring	MSD, compliant with DIN VDE 0126-1-1	via master
Selectable parameter settings	Greece, France, Spain, Portugal, Italy, Great Britain	via master
<b>Operating conditions</b>		
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	
<b>Fitting and construction</b>		
Degree of protection	IP 65	
DC Input side connection	MultiContact MC 4	
AC output side connection	WAGO 1.5 mm <sup>2</sup> ... 10 mm <sup>2</sup> (flexible) / 16 mm <sup>2</sup> (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	

\*incl. mounting plate

### StecaGrid 1900: Master-slave combination



StecaGrid 1900 D Master and 2 StecaGrid 1900 Slaves