



StecaGrid 300/500

The MiniString inverter series comprises the StecaGrid 300 and StecaGrid 500 inverters, with rated outputs of 300 W and 500 W, respectively.

StecaGrid 300 and StecaGrid 500 are built in a modular manner, and simple to install. With distribution over three phases, the system can at any time be expanded as desired, and thus flexibly adapts to your solar power system investment. StecaGrid 300 and StecaGrid 500 have an independent MPP tracker and achieve a very high efficiency of up to 95.8%.

Product features

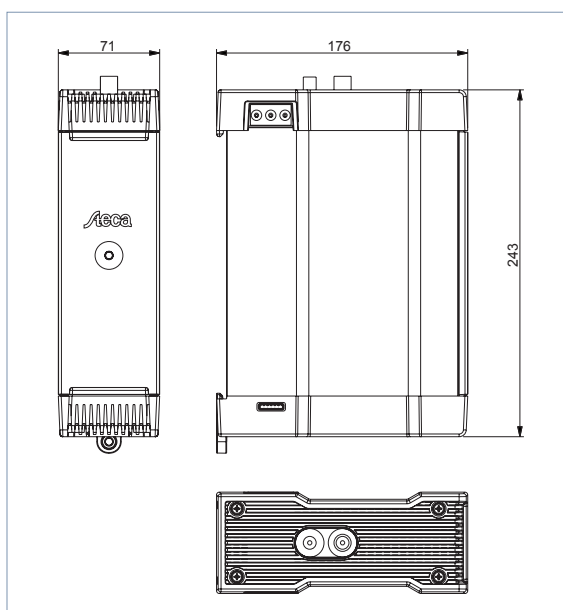
- Flexible and expandable
- High efficiency
- MiniString concept
- Low weight
- Simple installation
- One StecaGrid Control per system
- Wall-mounting with top-hat rail

Electronic protection functions

- Integrated temperature monitoring with output derating

Display

- Multi-coloured LED shows operating status



	StecaGrid 300	StecaGrid 500
DC input data		
MPP voltage	45 V ... 100 V	75 V DC ... 170 V DC
Maximum start voltage	100 V	170 V
Maximum permissible input voltage	135 V	230 V
Minimum input voltage for grid connected	45 V	75 V
Minimum input voltage for rated output	64 V	106 V
Maximum permissible input current	5 A	5 A
Maximum input power	320 W	530 W
Derating / limiting	automatic when: - input power is higher - the device is not cooled sufficiently - input currents > 5 A DC (higher currents are limited by the equipment and therefore will not damage the inverter)	
AC output data		
Output voltage	207 V ... 253 V (other values are possible)	
Rated output voltage	230 V	
Maximum output current	1.5 A	2.5 A
Maximum output power	300 W	500 W
Rated output power	300 W	500 W
Rated frequency	50 Hz	
Frequency	48 Hz ... 52 Hz (other values are possible)	
Feeding phases	single-phase	
Total harmonic distortion	< 6 % (max. output)	< 5 % (max. output)
Operating behaviour		
Maximum efficiency	94.8 %	95.8 %
European efficiency	93.4 %	94.5 %
MPP efficiency	99 %	
Power derating at full power	from 40 °C	
Switch-on power	2 W	
Standby power	0 W	
Inverter's own consumption (nighttime operation)	< 0.1 W	

	StecaGrid 300	StecaGrid 500
Safety		
Isolation principle	no galvanic isolation, transformerless	
Grid monitoring	optional, via StecaGrid Control	
Application conditions		
Area of application	indoor rooms, with or without air conditioning	
Ambient temperature	-20 °C ... +45 °C	
Humidity	0 % ... 95 %	
Noise emissions in standard operating conditions	< 32 dBA	
Equipment and design		
Ingress protection	IP 20	
DC connection	MultiContact MC 3 (Solarline 1), MC 4 (Solarline 2), or Tyco Solarlok	
AC connection	Wieland Electric GST 18i3V plug	
Data connection	Steca data coupling [provided with the inverter]	
Dimensions (X x Y x Z)	243 x 176 x 71 mm	
Weight	1.4 kg	
Communication interface	none	
Display	two-colour LED	
DC circuit breaker	no	
Cooling principle	natural convection	
Test certificate	CE mark	



StecaGrid Control

StecaGrid Control monitors a system with a maximum output of 3,600 watts.

The frontal display of the StecaGrid Control shows both the amount of energy produced by the MiniString inverters, and the current system status. It contains an integrated residual current circuit breaker.



Electronic protection functions

- Universal current sensitive residual current monitoring

Display

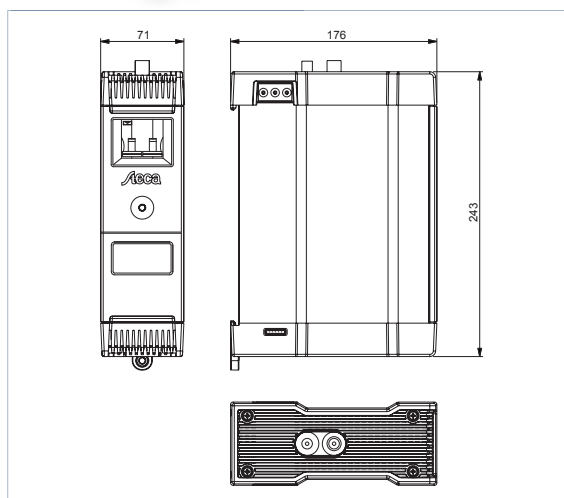
- Text LCD display
- for energy yield

Operation

- Main switch

Options

- Grid monitoring as per DIN VDE 0126 for StecaGrid Control D, or as per DIN VDE 0126-1-1 for StecaGrid Control D1



	StecaGrid Control N	StecaGrid Control D	StecaGrid Control D1
AC output data			
Output voltage	– *	196 V AC ... 253 V AC	
Rated output voltage	230 V AC		
Maximum output current	16 A		
Maximum output power	3,600 W		
Rated frequency	50 Hz		
Frequency	– *	49,8 Hz ... 50,2 Hz	
Feeding phases	single-phase		
Operating behaviour			
Inverter's own consumption (nighttime operation)	2.4 W		
Safety			
Grid monitoring	none	compliant with DIN VDE 0126	compliant with DIN VDE 0126-1-1
Application conditions			
Area of application	indoor rooms, with or without air conditioning		
Ambient temperature	-20 °C ... +45 °C		
Humidity	0 % ... 95 %		
Noise emissions in standard operating conditions	< 30 dBA		
Equipment and design			
Protection class	IP 20		
AC connection	1.5 m mains cable with mains plug	Wieland Electric GST 18i3V plug	
Data connection	Steca data coupling [provided with the inverter]		
Dimensions (X x Y x Z)	243 x 176 x 71 mm		
Weight	1.75 kg		
Communication interface	none		
Display	display screen		
Test certificate	CE mark		

* is not monitored.