coolcept-x

StecaGrid 1800x, StecaGrid 2300x, StecaGrid 3010x, StecaGrid 3600x, StecaGrid 4200x

Highest efficiency with longer service life

The high efficiency results in a peak efficiency of 98.6 % and a European efficiency of up to 98.3 %, which results in less lost power that must be dissipated into the environment. This improves your yields.

In addition to this, a new and unique cooling concept inside the inverter ensures an even distribution of the dissipated heat and a long service life for the device.

Product design and visualisation

The StecaGrid has a graphical LCD display for visualising the energy yield values, current performance and operating parameters of the system. Its innovative menu allows individual selection of the various measurements.

The guided, pre-programmed menu allows easy commissioning of the device.

Installation

The lightweights with only 11.5 kg / 12 kg can be easily and safely mounted on a wall. The supplied wall bracket make mounting of the device simple and convenient. The device does not need to be opened for installation. All connections and the DC circuit breaker are externally accessible.

The devices meet all the standards for the IP 65 protection class. Its robust stainless steel housing provides reliable protection against dust and water, including jet water. This enables problem-free installation of the inverters outdoors.

Product features

- Highest efficiency
- · Simple installation
- · Integrated data logger
- · Firmware update possible
- Low housing temperature at full load
 Solid stainless steel casing
- · Suitable for outdoor installation
- Lowest possible own consumptionIntegrated DC circuit breaker
- Protective insulation according to protection class II
- Very long service life
- · Droop Mode for integration in hybrid systems (further information: Catalogue Steca PV Off Grid / Single-phase and three-phase AC hybrid systems)
- Fixed voltage mode for other energy sources
 Service menu for parameter adjustment
- 7-year warranty after registration
- · Optimised shadow management using global MPP tracking

- · Multifunction graphical LCD display with backlighting
- · Animated representation of yield

Operation

- · Simple menu-driven operation
- · Multilingual menu navigation

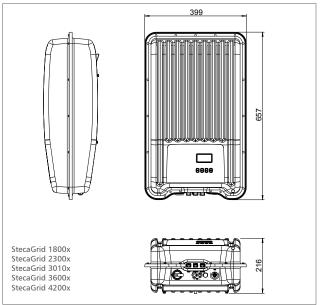
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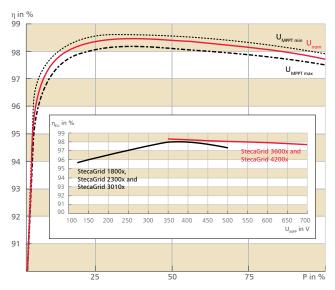
· Can be connected to a large-format display





StecaGrid 1800x StecaGrid 2300x StecaGrid 3010x StecaGrid 3600x StecaGrid 4200x

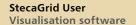




Efficiency values for the StecaGrid 3600 and comparison of the MPPT voltage of the all types

System monitoring and accessories







StecaGrid Portal Web portal



StecaGrid SEM Energy manager



Solar-Log™ and Meteocontrol WEB'log Accessories

	StecaGrid 1800x	StecaGrid 2300x	StecaGrid 3010x	StecaGrid 3600x	StecaGrid 4200x	
DC input side (PV-generator)					ı	
Maximum input voltage		600 V		84	5 V	
Operating input voltage range	125 500 V			350 700 V		
MPP voltage for rated output	160 V 500 V	205 V 500 V	270 V 500 V	350 V 700 V	360 V 700 V	
Number of MPP-Tracker	100 V 500 V	203 V 300 V	1	330 V 700 V	300 V 700 V	
Maximum input current	11.5 A 12 A					
·	1,840 W	2,350 W	3,070 W	3,770 W	4,310 W	
Maximum input power at maximum active output power	1,040 W	2,350 W	3,070 W	3,770 W	4,310 W	
Maximum recommended PV power	2,200 Wp	2,900 Wp	3,800 Wp	4,500 Wp	5,200 Wp	
AC output side (Grid connection)						
Grid voltage	185 V 276 V (depending on regional settings)					
Rated grid voltage	230 V					
Maximum output current	12 A	14	A	16 A	18,5 A	
Maximum active power (cos phi = 1)	1,800 W	2,300 W	3,000 W	3,680 W 1)	4,200 W 1)	
Maximum active power (cos phi = 0.95)	1,800 W	2,300 W	3,000 W	3,500 W	3,990 W	
Maximum apparent power (cos phi = 0.95)	1,900 VA	2,420 VA	3,160 VA	3,680 VA	4,200 VA	
Rated power	1,800 W	2,300 W	3,000 W	3,680 W ²⁾	4,200 W ³⁾	
Rated frequency	50 Hz and 60 Hz					
Frequency	45 Hz 65 Hz (depending on regional settings)					
Night-time power loss						
,						
Feeding phases	single-phase					
Distortion factor (cos phi = 1)	< 2 %					
Power factor cos phi		0.9	5 capacitive 0.95 induc	ctive		
Characterisation of the operating perform	ance					
Maximum efficiency		98 %			6 %	
European efficiency	97.4 %	97.6 %	97.7 %	98.3 %	98.2 %	
Californian efficiency	97.5 %	97.7 %	97.8 %	98.3 %	98.2 %	
MPP efficiency	> 99.7 % (static), > 99 % (dynamic)					
Own consumption	< 4 W					
Power derating at full power	from 50	°C (T _{amb})	from 45 °C (T _{amb}) ⁴⁾	from 50 °C (T _{amb})	from 45 °C (T _{amb})	
Safety						
Isolation principle	no galvanic isolation, transformerless					
Grid monitoring	yes, integrated					
Residual current monitoring	yes, integrated ⁵⁾					
Operating conditions						
Area of application	indoor rooms with or without air conditioning, outdoors with or without protection					
Ambient temperature	-15 °C +60 °C					
Storage temperature	-30 °C +80 °C					
Relative humidity	0 % 100 %, non condensating					
Noise emission (typical)	23 dBA	25 dBA	29 dBA	29 dBA	31 dBA	
Fitting and construction						
Degree of protection			IP 65			
Overvoltage category	III (AC), II (DC)					
DC Input side connection	Phoenix Contact SUNCLIX (1 pair)					
AC output side connection	Wieland RST25i3 plug, mating connector included					
Dimensions (X x Y x Z)	399 x 657 x 227 mm					
Weight						
	12 kg 11,5 kg					
Communication interface	K5485; 2 x	RS485; 2 x RJ45 sockets; connectable to Meteocontrol WEB'log or Solar-Log™; Ethernet interface				
Integrated DC circuit breaker	yes, compliant with VDE 0100-712					
Cooling principle		temperature-controlled fan, variable speed, internal (dustproof) see certificate download on the product page				
Test certificate		see certific	ate download on the pro	ouuci page		

¹⁾ Belgium: 3,330 W ²⁾ Portugal: 3,450 W ³⁾ Portugal: 3,680 W ⁴⁾ Specifications refer to rated input current



 $^{^{\}rm 5)}$ The design of the inverter prevents it from causing DC leakage current.