# 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 final commissioning of the device.

### Installation

The lightweights weigh only 9 kg and 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 IP65 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.



98.6%

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

# 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 consumption
- Integrated DC circuit breaker
- Protective insulation according to protection class II
- $\cdot$  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

## Displays

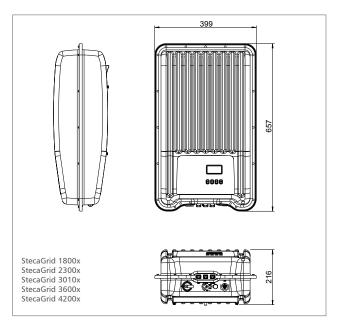
- Multifunction graphical LCD display with backlighting
- · Animated representation of yield

## Operation

- · Simple menu-driven operation
- Multilingual menu navigation

# Options

· Can be connected to the StecaGrid Vision display unit or a large-format display



# System monitoring and accessories



StecaGrid User Visualisation software



StecaGrid Portal\* Web portal



StecaGrid SEM Energy manager



Solar-Log 500/1000™ and Meteocontrol WEB'log Comfort Accessories

	StecaGrid 1800x	StecaGrid 2300x	StecaGrid 3010x	StecaGrid 3600x	StecaGrid 4200x
DC input side (PV-generator)					
Maximum input voltage	600 V			845 V	
Minimum input voltage for feeding	125 V			350 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
Maximum input current	11.5 A			12 A	
Maximum input power at maximum active output power	1,840 W	2,350 W	3,070 W	3,690 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	3,600 W 1)	4,200 W 1)
Maximum active power (cos phi = 0.95)	1,800 W	2,300 W	3,000 W	3,530 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	3,600 W <sup>2)</sup>	4,200 W <sup>3)</sup>
Rated frequency	50 Hz and 60 Hz				
Frequency	45 Hz 65 Hz (depending on regional settings)				
Night-time power loss	< 1.2 W < 0.7 W				
Feeding phases	single-phase				
Distortion factor (cos phi = 1)	< 2 %				
Power factor cos phi	0.95 capacitive 0.95 inductive				
Characterisation of the operating performan					
Maximum efficiency	98 % 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 <sub>anb</sub> ) from 45 °C (T <sub>anb</sub> )			from 50 °C (T <sub>amb</sub> )	from 45 °C (T <sub>amb</sub> )
Safety					
Isolation principle	no galvanic isolation, transformerless				
Grid monitoring	yes, integrated				
Residual current monitoring	yes, integrated 4				
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	RS485; 2 x RJ45 sockets; connectable to StecaGrid Vision, Meteocontrol WEB'log or Solar-Log <sup>™</sup> ; Ethernet interface				
Integrated DC circuit breaker	yes, compliant with VDE 0100-712				
Cooling principle	temperature-controlled fan, variable speed, internal (dustproof)				
Test certificate	CE mark, VDE AR N 4105, G83				
	under preparation: AS4777, CEI 0-21				

<sup>1)</sup> Belgium: 3,330 W <sup>2)</sup> Portugal: 3,450 W <sup>3)</sup> Portugal: 3,680 W <sup>4)</sup> The design of the inverter prevents it from causing DC leakage current.

