coolcept

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

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 / 9.5 kg and can be easily and safely mounted on a wall. The supplied wall bracket and practical recessed grips for right and left handed installers 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.

Product features

- Highest efficiency
- Simple installation
- Integrated data logger
- Firmware update possible
- Low housing temperature at full load
- Functionally perfect, environmentally-friendly plastic housing
- Lowest possible own consumption
- Integrated 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

Displays

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

Operation

- Simple menu-driven operation
- Multilingual menu navigation

Options

- Can be connected to a large-format display
- 120 V variant: StecaGrid 2020 (for technical data see www.stecasolar.com)

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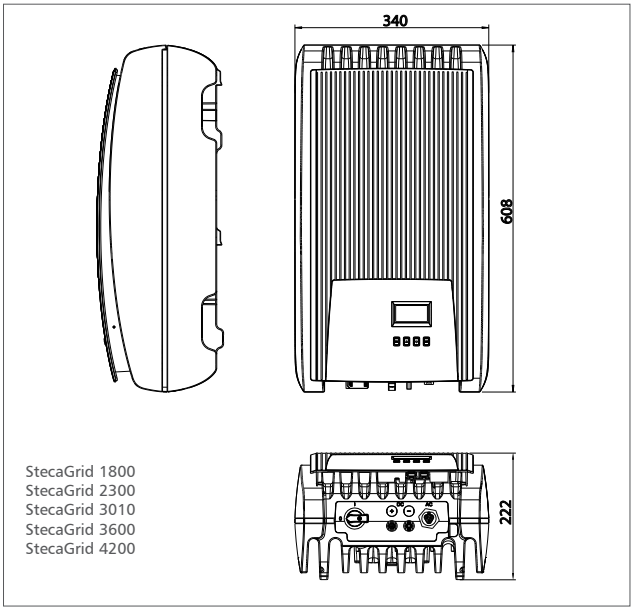

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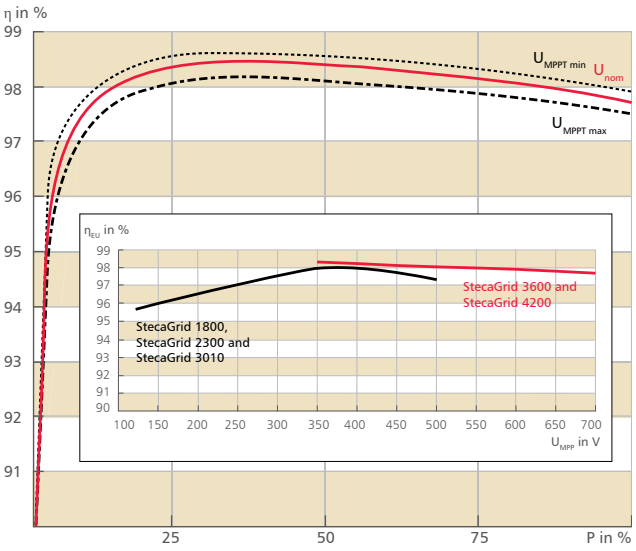

Efficiency values for the StecaGrid 3600 and comparison of the MPPT voltage of the all types

System monitoring and accessories

StecaGrid User
Visualisation software

StecaGrid Portal
Web portal

StecaGrid SEM
Energy manager

Solar-Log™ and Meteocontrol WEB'log
Accessories

	StecaGrid 1800	StecaGrid 2300	StecaGrid 3010	StecaGrid 3600	StecaGrid 4200
DC input side (PV-generator)					
Maximum input voltage	600 V			845 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	1				
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	3,770 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	< 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 performance					
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	ab 50 °C (T_{amb})		ab 45 °C (T_{amb})	ab 50 °C (T_{amb})	ab 45 °C (T_{amb})
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				
Ambient temperature	-15 °C ... +60 °C				
Storage temperature	-30 °C ... +80 °C				
Relative humidity	0 % ... 95 %, non-condensating				
Noise emission (typical)	23 dBA	25 dBA	29 dBA	29 dBA	31 dBA
Fitting and construction					
Degree of protection	IP 21 (casing: IP 51; display: IP 21)				
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)	340 x 608 x 222 mm				
Weight	9.5 kg			9 kg	
Communication interface	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				
Test certificate	see certificate download on the product page				

[1] Belgium: 3,330 W [2] Portugal: 3,450 W [3] Portugal: 3,680 W [4] The design of the inverter prevents it from causing DC leakage current.