coolcept

StecaGrid 1500, StecaGrid 2000, StecaGrid 2500, 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.

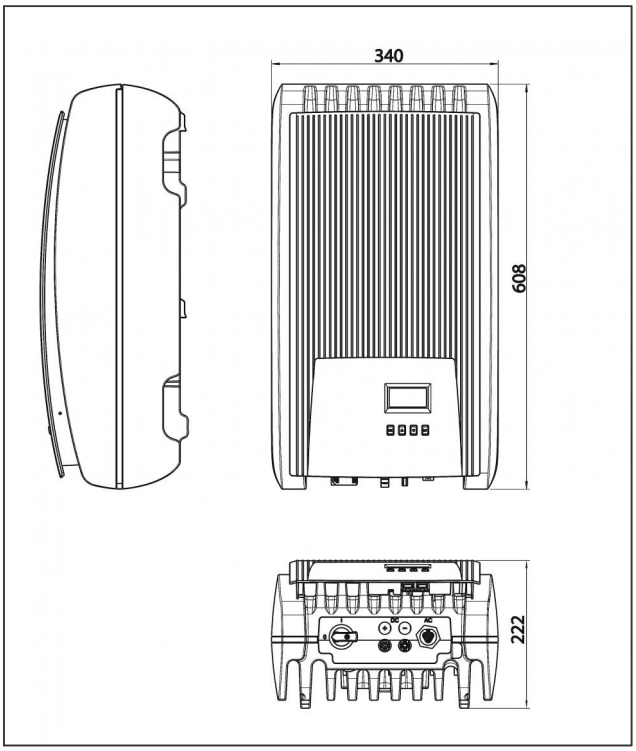
Product design and visualisation

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 8.3 kg, 9.1 kg and 9.6 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

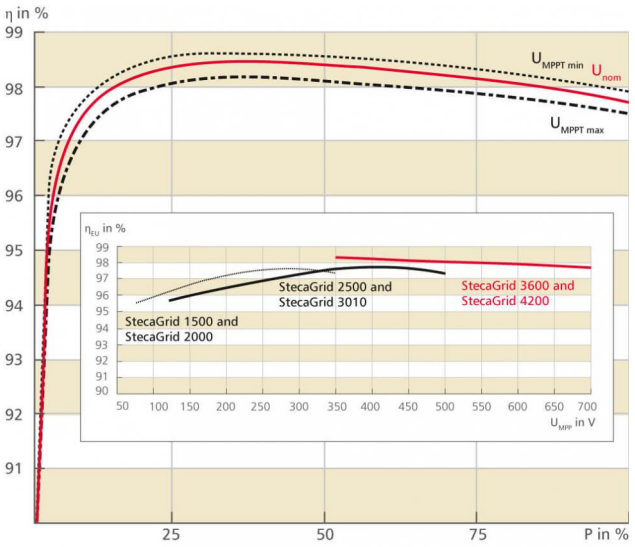
- Highest efficiency
- Simple installation
- Integrated data logger
- Low housing temperature at full load
- Integrated DC circuit breaker
- Protective insulation according to protection class II
- Very long service life
- Droop Mode for integration in hybrid systems
- Fixed voltage mode for other energy sources
- Up to 7-year free 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



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

	StecaGrid 1500	StecaGrid 2000	StecaGrid 2500	StecaGrid 3010	StecaGrid 3600	StecaGrid 4200
DC input side (PV generator)						
Maximum input voltage	420 V	420 V	600 V	600 V	845 V	845 V
Operating input voltage range	75 V … 350 V	75 V … 350 V	125 V … 500 V	125 V … 500 V	350 V … 700 V	350 V … 700 V
Number of MPP tracker	1					
Maximum input current	11.5 A	11.5 A	11.5 A	11.5 A	12.0 A	12.0 A
Maximum short circuit current	+20 A / -13 A					
Maximum input power at maximum active output power	1540 W	2050 W	2560 W	3070 W	3770 W	4310 W
AC output side (Grid connection)						
Grid voltage	185 V … 276 V (depending on regional settings)					
Rated grid voltage	230 V					
Maximum output current	12.0 A	12.0 A	14.0 A	14.0 A	16.0 A	18.5 A
Maximum active power (cos phi = 1)	1500 W	2000 W	2500 W	3000 W	3680 W	4200 W
Maximum active power (cos phi = 0.95)	1500 W	2000 W	2500 W	3000 W	3500 W	3990 W
Maximum apparent power (cos phi = 0.95)	1850 VA	2100 VA	2630 VA	3160 VA	3680 VA	4200 VA
Rated power	1500 W	2000 W	2500 W	3000 W	3680 W	4200 W
Rated frequency	50 Hz and 60 Hz					
Frequency	45 Hz … 65 Hz (depending on regional settings)					
Night-time power loss	< 2 W W					
Feeding phases	single-phase					
Total harmonic distortion (cos phi = 1)	< 2 %					
Power factor cos phi	0.95 capacitive … 0.95 inductive					
Characterisation of the operating performance						
Max. efficiency	98.0 %	98.0 %	98.0 %	98.0 %	98.6 %	98.6 %
European efficiency	97.4 %	97.5 %	97.6 %	97.7 %	98.3 %	98.2 %
Californian efficiency	97.6 %	97.7 %	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})	50 °C (T_{amb})	50 °C (T_{amb})	45 °C (T_{amb})	50 °C (T_{amb})	45 °C (T_{amb})
Safety						
Isolation principle	no galvanic isolation, transformerless					
Grid monitoring	yes, integrated					
Residual current monitoring	yes, integrated (The design of the inverter prevents it from causing DC leakage current)					
Operating conditions						
Area of application	indoor rooms with or without air conditioning					
Climate protection class as per IEC 60721-3-3	3K3					
Ambient temperature	-15 °C … +60 °C					
Storage temperature	-30 °C … +80 °C					
Relative humidity	0 % … 95 %, non-condensating					
Noise emission (typical)	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), mating connector included					
AC output side connection	Wieland RST25i3 plug, mating connector included					
Dimensions (X x Y x Z)	340 x 608 x 222 mm					
Weight	8.3 kg	8.3 kg	9.6 kg	9.6 kg	9.1 kg	9.1 kg
Communication interface	RS-485 (2 x RJ45 sockets; connectable to Meteocontrol WEB'log or Solar-Log™, Ethernet interface (1 x RJ45), Modbus RTU (1 x RJ10 socket: connectable to energy counter)					
Integrated DC circuit breaker	yes, compliant with VDE 0100-712					
Cooling principle	temperature controlled fan, variable speed, internal (dustproof)					
Test certificate	see certificate download on the product page					

- Maximum active power Belgium: StecaGrid 3600(x) / 4200(x) = 3,330 W (cos phi = 1)
- Rated power Portugal: StecaGrid 3600(x) = 3,450 W, StecaGrid 4200(x) = 3,680 W