

coolcept-x

**StecaGrid 1500x, StecaGrid 2000x, StecaGrid 2500x,
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 11 kg, 11.5 kg and 12 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 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

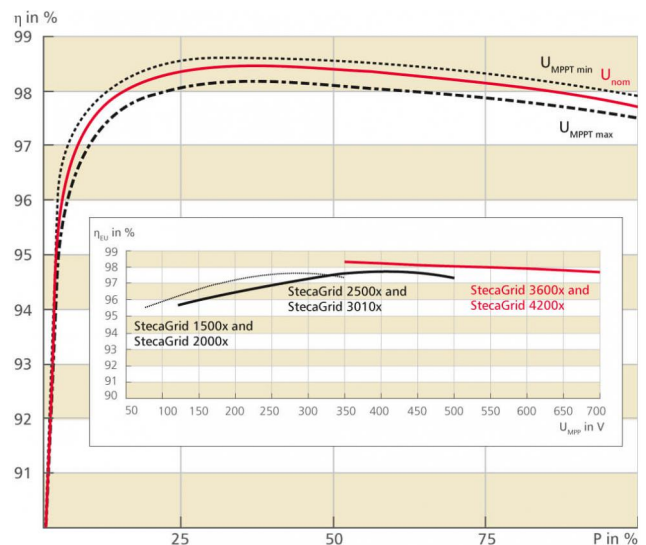
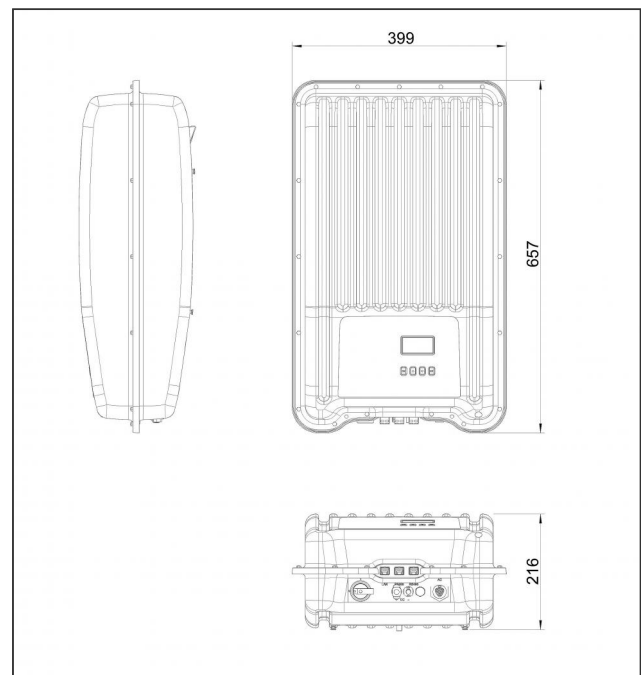
- Highest efficiency
- Simple installation
- Integrated data logger
- Low housing temperature at full load
- Solid stainless steel casing
- Suitable for outdoor installation
- Integrated DC circuit breaker
- Very long service life
- Droop Mode for integration in hybrid systems
- Fixed voltage mode for 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 3600x and comparison of the MPPT voltage of the all types



| | StecaGrid 1500x | StecaGrid 2000x | StecaGrid 2500x | StecaGrid 3010x | StecaGrid 3600x | StecaGrid 4200x |
|--|---|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| 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, outdoors with or without protection | | | | | |
| Climate protection class as per IEC 60721-3-4 | 4K4H | | | | | |
| Ambient temperature | -25 °C ... +60 °C | | | | | |
| Storage temperature | -30 °C ... +80 °C | | | | | |
| Relative humidity | 0 % ... 100 %, non-condensating | | | | | |
| Noise emission (typical) | 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), mating connector included | | | | | |
| AC output side connection | Wieland RST25i3 plug, mating connector included | | | | | |
| Dimensions (X x Y x Z) | 399 x 657 x 227 mm | 399 x 657 x 227 mm | 399 x 657 x 227 mm | 399 x 657 x 222 mm | 399 x 657 x 222 mm | 399 x 657 x 222 mm |
| Weight | 11.0 kg | 11.0 kg | 11.0 kg | 12.0 kg | 11.5 kg | 11.5 kg |
| Communication interface | RS-485 (2 x RJ45 sockets; connectable to Meteocontrol WEB'log or Solar-Log™), Ethernet interface (1 x RJ45) | | | | | |
| 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

