# 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, 9.5 kg, 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
- $\boldsymbol{\cdot}$  Droop Mode for integration in hybrid systems
- · Fixed voltage mode for other energy sources
- · 7-year warranty after registration
- · Optimised shadow management using global MPP tracking

## Displays

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

# Operation

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

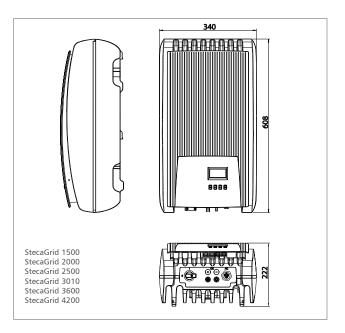
## Options

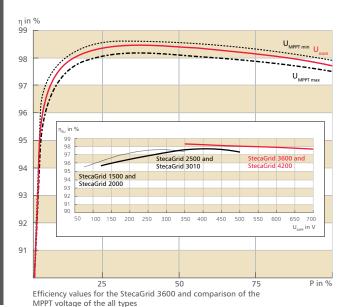
- · Can be connected to a large-format display
- · 120 V variant: StecaGrid 2020 (on request)





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# **System monitoring and accessories**







StecaGrid Portal Web portal



StecaGrid SEM Energy manager



Solar-Log™ and Meteocontrol WEB'log Accessories

|  | StecaGrid 1500  | StecaGrid 2000 | StecaGrid 2500         | StecaGrid 3010           | StecaGrid 3600        | StecaGrid 4200               |
|--|---|----------------|------------------------|--------------------------|-----------------------|------------------------------|
| DC input side (PV-generator)                       |   |                |                        |                          |                       |                              |
| Maximum input voltage                              | 420 V   |                | 60                     | 0 V                      | 84                    | 5 V                          |
| Operating input voltage range                      | 75  | 350 V          | 125 500 V              |                          | 350                   | . 700 V                      |
| Number of MPP-Tracker                              |   |                |                        | 1                        |                       |                              |
| Maximum input current                              | 11.5 A 12 A   |                |                        |                          |                       |                              |
| Maximum input power at maximum active output power | 1,540 W   | 2,050 W        | 2,560 W                | 3,070 W                  | 3,770 W               | 4,310 W                      |
| Maximum recommended PV power                       | 1,800 Wp  | 2,500 Wp       | 3,100 Wp               | 3,800 Wp                 | 4,500 Wp              | 5,200 Wp                     |
| AC output side (Grid connection)                   |   | ·              |                        |                          |                       |                              |
| Grid voltage                                       |   | 1              | 85 V 276 V (depend     | ing on regional setting  | s)                    |                              |
| Rated grid voltage                                 | 230 V   |                |                        |                          |                       |                              |
| Maximum output current                             |   |                |                        |                          |                       | 18.5 A                       |
| Maximum active power (cos phi = 1)                 | 1,500 W   | 2,000 W        | 2,500 W                | 3,000 W                  | 3,680 W <sup>1)</sup> | 4,200 W <sup>1)</sup>        |
| Maximum active power (cos phi = 0.95)              | 1,500 W   | 2,000 W        | 2,500 W                | 3,000 W                  | 3,500 W               | 3,990 W                      |
| Maximum apparent power (cos phi = 0.95)            | 1,850 VA  | 2,100 VA       | 2,630 VA               | 3,160 VA                 | 3,680 VA              | 4,200 VA                     |
| Rated power  | 1,500 W   | 2,000 W        | 2,500 W                | 3,000 W                  | 3,680 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                              | < 2 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   |                | o.oo capaciare .       | o.ssaac.ive              |                       |                              |
| Maximum efficiency                                 | periormanee   | 98             | %                      |                          | 98                    | 6 %                          |
| European efficiency                                | 97.4 %  | 97.5 %         | 97.6 %                 | 97.7 %                   | 98.3 %                | 98.2 %                       |
| Californian efficiency                             | 97.5 %  | 97.6 %         | 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 45 °C (T <sub>smb</sub> ) |
| Safety   |   | db 50 C ('amb' |                        | ab 15 C ('amb'           | as so a ('amb'        | anb'                         |
| Isolation principle                                |   |                | no galvanic isolatio   | on transformerless       |                       |                              |
| Grid monitoring                                    | no galvanic isolation, transformerless  yes, integrated   |                |                        |                          |                       |                              |
| Residual current monitoring                        | yes, integrated <sup>4)</sup>   |                |                        |                          |                       |                              |
| Operating conditions                               |   |                | yes, mee               | gracea                   |                       |                              |
| Area of application                                |   |                | indoor rooms with or v | vithout air conditioning | 1                     |                              |
| Climatic category according to IEC 60721-3-3       | indoor rooms with or without air conditioning  3K3  |                |                        |                          |                       |                              |
| Ambient temperature                                | -15 °C +60 °C   |                |                        |                          |                       |                              |
| Storage temperature                                | -13 °C +00 °C   |                |                        |                          |                       |                              |
| Relative humidity                                  | 0 % 95 %, non-condensating  |                |                        |                          |                       |                              |
| Noise emission (typical)                           | 22 dBA  | 23 dBA         | 26 dBA                 |                          | dBA                   | 31 dBA                       |
| Fitting and construction                           | 22 40/1   | 25 400         | 20 000                 | 29                       |                       | 51400                        |
| Degree of protection                               |   |                | IP 21 (casing: IP 5    | 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 9.6 kg 9.1 kg  |                |                        |                          |                       |                              |
| Communication interface                            | RS485 (2 x RJ45 sockets; connectable to Meteocontrol WEB'log or Solar-Log™, 1 x RJ11 socket: connectable to Modbus RTU counter),<br>Ethernet interface (1 x RJ45) |                |                        |                          |                       |                              |
| Integrated DC circuit breaker                      | yes, compliant with VDE 0100-712  |                |                        |                          |                       |                              |
| Cooling principle                                  | temperature-controlled fan, variable speed, internal (dustproof)  |                |                        |                          |                       |                              |
|  |   |                |                        |                          |                       |                              |

