

## coolcept-120

### StecaGrid 2020

#### Highest efficiency with longer service life

The high efficiency results in a peak efficiency of 98.6 % and a European efficiency of up to 97.5 %, 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

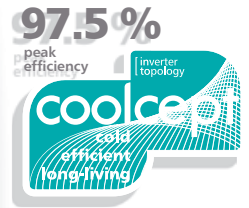
The StecaGrid has a graphical LCD display for visualising the energy yield values, current performance and operating parameters of the system. Its innovative menu allows individual selection of the various measurements.

The guided, pre-programmed menu allows easy final commissioning of the device.

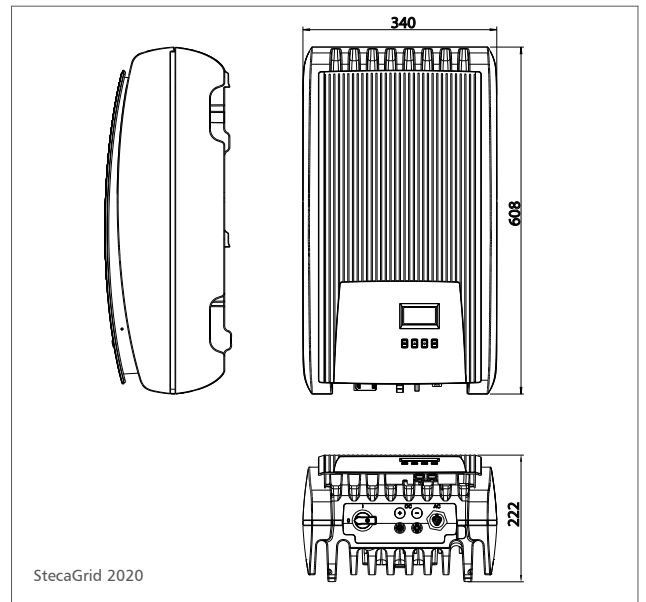
#### Installation

The lightweights weigh only 9 kg and can be easily and safely mounted on a wall. The supplied wall bracket 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.

The coolcept-120 inverters meet all requirements for use in countries with 110 V, 120 V and 127 V grids. The devices are the optimum solution for markets such as South America, Africa and Asia.



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#### 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

#### 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 SEM**  
Energy manager



**Meteocontrol WEB'log and  
Meteocontrol WEB'log Comfort**  
Data logger



**Solar-Log 500/1000™**  
Data logger

 <b>StecaGrid 2020</b>	
<b>DC input side (PV-generator)</b>	
Maximum input voltage	450 V
Minimum input voltage for feeding	190 V
MPP voltage for rated output	210 V ... 400 V
Maximum input current	10 A
Maximum input power at maximum active output power	2,090 W
Maximum recommended PV power	2,400 Wp
<b>AC output side (Grid connection)</b>	
Grid voltage	90 V ... 150 V (depending on regional settings)
Rated grid voltage	120 V
Maximum output current	18 A
Maximum active power (cos phi = 1)	2,000 W
Rated power	2,000 W
Rated frequency	50 Hz and 60 Hz
Frequency	45 Hz ... 65 Hz (depending on regional settings)
Night-time power loss	< 0.9 W
Feeding phases	single phase
Distortion factor (cos phi = 1)	< 2 %
Power factor cos phi	> 0.99
<b>Characterisation of the operating performance</b>	
Maximum efficiency	97.5 %
European efficiency	96.7 %
Californian efficiency	96.8 %
MPP efficiency	> 99.7 % (static), > 99 % (dynamic)
Own consumption	< 8 W
Power derating at full power	from 50 °C (T <sub>amb</sub> )
<b>Safety</b>	
Isolation principle	no galvanic isolation, transformerless
Grid monitoring	yes, integrated
Residual current monitoring	yes, integrated <sup>1)</sup>
<b>Operating conditions</b>	
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)	29 dBA
<b>Fitting and construction</b>	
Degree of protection	IP 21 (casing: IP 51; display: IP 21)
Overvoltage category	III (AC), II (DC)
DC Input side connection	MultiContact MC 4 (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 kg
Communication interface	RS485; 2 x RJ45 sockets; connectable to StecaGrid Vision, Meteocontrol WEB'log or Solar-Log™
Integrated DC circuit breaker	yes, compliant with DIN VDE 0100-712
Cooling principle	temperature-controlled fan, variable speed, internal (dustproof)
Test certificate	CE mark



<sup>1)</sup> The design of the inverter prevents it from causing DC leakage current.