

StecaGrid 300/500

StecaGrid Guard



StecaGrid Remote



Discover flexibility and more ...

## StecaGrid 300/500 (Inverter)

## StecaGrid Guard (Control Unit)

## StecaGrid Remote (Remote Display)

### The Highlights

#### StecaGrid 300/500

##### Flexible

- A string of solar panels can be connected to an inverter. Enlarge your system by simply adding more inverters and creating the system size you want.
- StecaGrid 300 can be combined up to a system size of 3600 Wac and the StecaGrid 500 up to a system size of 3500 Wac.

##### Eco-efficiency

- The StecaGrid 300 inverter has an efficiency rate of 93,8 % at maximum power. The StecaGrid 500 has an even higher maximum power efficiency rate of 95,8 %.
- Each solar panel has its own optimum operating voltage (or maximum power point, MPP). This is the voltage at which the panel generates the highest possible power. Because the StecaGrid 300 and StecaGrid 500 use the MiniString concept, the maximum power point can be searched for each string. As a result, your solar system is less susceptible to those factors such as partial shade, module temperature and module orientation.

##### Ease of installation and use

- Low weight, allowing installation by just one person
- StecaGrid 300 and StecaGrid 500 are available with both Tyco and Multicontact (MC4) DC connections
- No special equipment needed to make electrical connections

- All electrical contacts safe
- Strings are small and relatively low in voltage

#### StecaGrid Guard

- The StecaGrid Guard monitors the performance of your solar system, providing an overview of kWh's generated, system status and (optionally in StecaGrid Guard D) safety functions (ENS\*). Each solar system needs only one StecaGrid Guard. And because the StecaGrid Guard comes in the same sizes as the StecaGrid 300 and StecaGrid 500, you simply connect it to the right-hand side of the inverter(s). All data is transferred via a data link between the inverter(s) and the StecaGrid Guard, which measures the performance of each inverter connected to it.

#### StecaGrid Remote

- To complement the StecaGrid Guard, an external, wireless communication unit is available: the StecaGrid Remote. In addition to system status, the display gives an overview of the energy currently being generated, as well as historical data on energy generated over the previous day, week, month and year. StecaGrid Remote can be installed anywhere near the inverter system.

\* mandatory in some countries

## StecaGrid 300 / StecaGrid 500 (Inverter)

	StecaGrid 300	StecaGrid 500
<b>Input</b>		
Input voltage range	45 – 135 V DC	45 – 230 V DC
MPPT range	45 – 100 V DC	75 – 170 V DC
Maximum recommended PV power	375 Wp	625 Wp
Maximum input rating	320 W*	530 W*
Maximum input current	5 A*	5 A*
DC connectors	Multi-Contact MC 4 or Tyco Solarlok	Multi-Contact MC 4 or Tyco Solarlok
*) Greater available input power and/or higher available current are not utilised as the inverter contains a protection against overload.		
<b>Output</b>		
Nominal output rating	300 W	500 W
Nominal output voltage / frequency	230 V / 50 Hz	230 V / 50 Hz
Maximum efficiency	93,8 %	95,8 %
European efficiency	92,8 %	94,5 %
Power factor	> 0,95	> 0,95
Harmonic distortion	< 7 % (at maximum power)	< 7 % (at maximum power)
AC connectors	Wieland Electric GST 18i3V	Wieland Electric GST 18i3V
<b>General</b>		
Galvanic separation	non	non
Internal power supply	supplied by solar panel (no Stand-by power)	supplied by solar panel (no Stand-by power)
Start-up/switching off	Automatic start / stop	Automatic start / stop
Start current	Starts up at > 2 W, 45 V input voltage	Starts up at > 2 W, 45 V input voltage
AC monitor	Voltage (230 V +/- 10%)* Frequency (50 Hz +/- 2 Hz) *	Voltage (230 V +/- 10%)* Frequency (50 Hz +/- 2 Hz) *
Anti-islanding protection	Voltage and frequency window monitoring; ENS optional with StecaGrid Guard D	Voltage and frequency window monitoring; ENS optional with StecaGrid Guard D
Dimensions (h x d x w)	242 x 186 x 71 mm	242 x 186 x 71 mm
Weight	1,4 kg	1,4 kg
*) Other limit presets are possible		
<b>Environmental conditions</b>		
Temperature	-20 °C to 45 °C	-20 °C to 45 °C
Installation	Indoors (protection class IP 20)	Indoors (protection class IP 20)
<b>Installation and connection</b>		
Installation of a single inverter	Three fixing screws	
Installation of two and more inverters	DIN rail	
Interconnection AC side	AC connector (Wieland Electric GST 18i3V 1P1) *	
Interconnection data	Steca data connector *	
*) Both connectors are supplied with the inverter.		

Norms and certification	
The inverter satisfies the requirements of the following norms and standards:	
EMC; Emission	EN 50081-1 (EN 55014 and EN 55022)
EMC; Immunity	EN 50082-1
Safety	EN 60950 and EN 50178
Quality certification	ISO 9001
Environmental certification	ISO 14001
Approvals	CE mark

## StecaGrid Guard N / StecaGrid Guard D (Control Unit)

	StecaGrid Guard N	StecaGrid Guard D
Input 230 Vac	AC connector (Wieland Electric GST 18i3V 1P1) *	AC connector (Wieland Electric GST 18i3V 1P1) *
Data	Steca data connector *	Steca data connector *
Output 230 V AC	1.5 m mains flex with mains plug	1.5 m mains flex with mains plug
Earth leakage circuit breaker	30 mA AC; **	30 mA AC; **
Main isolator switch	Yes	Yes
Display	refer to: 'Functionality'	refer to: 'Functionality'
Dimensions (h x d x w)	250 x 175 x 70 mm	250 x 175 x 70 mm
Weight	1.75 kg	1.75 kg
Self consumption	2.7 W	2.7 W
ENS	without ENS	according to DIN VDE 0126
*) Both connectors are supplied with the inverter. **) DC sensitivity is suitable for StecaGrid 300/500.		
<b>Norms and certification</b>		
The control unit StecaGrid Guard satisfies the requirements of the following norms and standards:		
EMC; Emission EN 50081-1	(EN 55014 and EN 55022)	
EMC; Immunity	EN 50082-1	
Safety	EN 60950	
AC monitoring	DIN VDE 0126 (only StecaGrid Guard D)	
Quality certification	ISO 9001	
Environmental certification	ISO 14001	
Approvals	CE mark	

## StecaGrid Remote (Remote Display)

	StecaGrid Remote
Display	from StecaGrid Guard
Transceiver	868 MHz ISM
Power supply	2x LR06 (AA) batteries
<b>Norms and certification</b>	
The remote display StecaGrid Remote satisfies the requirements of the following norms and standards:	
RF transmission	EN 300 220