One for all

This incomparably affordable all-in one solution offers functions for very different applications and is even scalable in relation to the power requirement. Whether you need one or more MPP trackers, high-vol-tage or low-voltage storage, or a solution with or without an emergency power supply – everything is possible. Steca has already thought of and prepared for charging an electric vehicle straight from a PV generator. The new components and setting options enable the use in many countries.

Maximum efficiencies at all input voltages and reliable cooling concept

The maximum efficiencies of the state-of-the-art power electronics topology ensure minimal losses, thus guaranteeing a very long service life thanks to extremely low levels of self-heating.





The advantages of coolcept flex inverters coolcept fleX is flexible.

Multiple MPP trackers allow handling simple or even complicated module fields.

coolcept fleX is tough und uncomplicated.

Indoor and outdoor installation is enabled by a robust IP65-casing. However, the product line is not only one of the lightest in its class, but is also very easy to install too.

coolcept fleX is future-proof.

Steca is offering an integrated, future-proof concept for energy generation, consumption, storage and feeding for the modern home of tomorrow.



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RELIABLE & VERSATILE Coolcept fleX



COOLCEPT FLEX Reliable technology – even more versatile

With coolcept fleX Steca introduces the successor generation to the established coolcept-topology. Coolcept fleX offers a creative energy concept for any modern home.

STECA

Duality

What is coolcept fleX?

The brand-new electronic platform is being used as the technological heart of the next generation of solar electronics and connects photovoltaics-based power generation, load management, and even e-mobility for the first time ever. The coolcept fleX platform is open with regard to its future use, it is still implemented on a single board. This extremely small and compact format permits the use of affordable standard components on the circuit board. Thus making it possible to use the same device for various differing applications.

coolcept fleX inverter

Coolcept fleX is the centerpiece of the new inverter generation. As usual, with nominal powers of 1.5 - 4.6 kW, they attain particularly high peak efficiencies.

	StecaGrid 1511	StecaGrid 2011	StecaGrid 2511	StecaGrid 3011	StecaGrid 3011_2	StecaGrid 3611	StecaGrid 3611_2	StecaGrid 4611_2
DC input (PV generator)		·	·	·			·	
Maximum input voltage	450 V			750 V				
MPP voltage range	75 V 360 V			125 V .	600 V	150 V 600 V		
Operating input voltage range at nominal power	120 V 360 V	160 V 360 V	200 V 360 V	230 V .	600 V	280 V .	600 V	360 V 600 V
Number of MPP trackers		1	1	1	2	1		2
Maximum input current	13.0 A				2 x 13.0 A	13.0 A	2 x 1	3.0 A
Maximum input power at					<u> </u>			
maximum active output power	1540 W	2050 W	2560 W	307	0 W	377	70 W	4740 W
AC output (Grid connection)								
Grid voltage				185 267 V (dependi	ng on regional settings)			
Rated grid voltage	230 V							
Maximum output current	12.0 A		14.0 A		16.0 A		20.0 A	
Maximum active power (cos phi = 1)	1500 W	2000 W	2500 W	3000 W		3680 W		4600 W
Maximum apparent power	1500 VA	2000 VA	2500 VA	300	0 VA	3680 VA		4600 VA
Rated power	1500 W	2000 W	2500 W	300	0 W	3680 W		4600 W
Rated frequency	50 HZ and 60 Hz							
Frequency	45 Hz 65 Hz (depending on regional settings)							
Night-time power loss	< 3 W							
Feeding phases	single-phase							
Total harmonic distortion (cos phi = 1)								
Power factor cos phi	< 3% 0.8 capacitive 0.8 inductive							
				0.8 capacitive .	0.8 inductive			
Characterisation of the operating performance								
May efficiency		97.4 %	1	97 %			97.4 %	
European efficiency	96.1 %	96.5 %	96.6 %	96.3 % 96.9 %				
MPP efficiency	> 99.7 % (static), > 99 % (dynamic)							
Own consumption	< 20 W							I
Power derating at full power from	50 °C (T _{amb})				45 °C (T _{amb})			40 °C (T _{amb})
Safety								
Isolation principle	no galvanic isolation, transformerless							
Grid monitoring	yes, integrated, integriert							
Residual current monitoring	yes, integrated (The design of the inverter prevents it from causing DC leakage current)							
Protection class	protection class 2 (RCD type A sufficient)							
Operating conditions								
Area of application	outdoor / indoor use							
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 (mating connector included)	Phoenix Contact SUNCLIX (1 pair) Phoenix Contact Phoenix Contact Phoenix Contact SUNCLIX (2 pair) SUNCLIX (1 pair)							
AC output side connection	Stecker Wieland RST25i3, Gegenstecker im Lieferumfang enthalten							
Dimensions (X x Y x Z)	399 x 657 x 222 mm							
Weight		11.7 kg		12.4 kg	13 kg	12.4 kg	13 kg	13.1 kg
Communication interface	RS-485 (1 x RJ45 sockets; connectable to Meteocontrol WEB 'log or Solar-Log™, Ethernet interface (1 x RJ45), Modbus RTU (1 x RJ45 sockets: connectable to energy counter)							
Integrated DC circuit breaker	ves, compliant with VDE 0100-712							
Cooling principle	temperature controlled fan, variable speed, internal (dustproof)							
Test certificates	see certificate download on the product page							