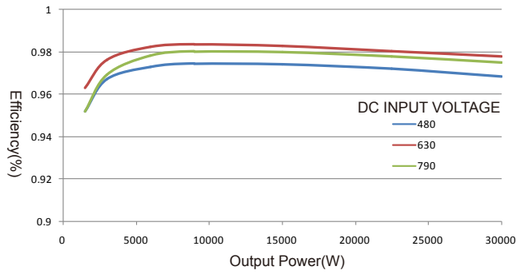
30/36kW Three Phase Grid-tied PV Inverters

CPS SCA30/36KTL-DO grid-tied PV inverters are transformerless, three phase products. The maximum input voltage is 1000V which makes the configuration more flexible. Patented 3-level control algorithm and thermal design provide 98.6% maximum efficiency and 98.1% Euro efficiency. This type three phase string inverters are designed with the DC switch integrated. And provide a standard for fuse which designed in the wiring box. Integrated PV input string fault detection circuit and PV input arcing fault detection circuit to ensure the safety.

CPS SCA30KTL-DO
CPS SCA36KTL-DO

Efficiency Curve

CPS SCA30KTL-DO @400Vac



High Efficiency

- Maximum efficiency of 98.6%, Euro efficiency of 98.1%
- 3-level technology and enhanced control mechanism to achieve high efficiency over wide load range
- 2 MPP trackers to achieve higher system efficiency
- Transformerless design

High Reliability

- Comprehensive protection functions
- Enhanced DSP system
- Integrated PV input string fault detection
- Integrated PV input arcing fault detection and interruption
- circuit
- Advanced thermal design, with variable speed fans
- Anti-Islanding protection
- Ground-fault detection and interruption circuit
- Optional DC SPD
- Electrolyte-free design" for improved long-term reliability

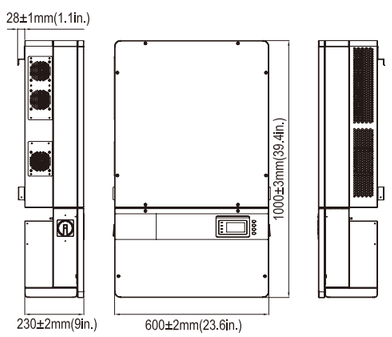
5 years standard warranty, optional extension up to 20 years

Broad Adaptability

- Integrated String Current and Arc Fault Detecting
- Advanced PID Solutions
- Separate wiring box design
- Low voltage ride through, and provide reactive power to support the grid
- IP65, outdoor application
- Active power derating and Reactive power adjustable
- BDEW compatible
- 1000V maximum input voltage enable flexible configuration
- Broad MPPT range enable flexible PV string configuration

Suitable for multi-inverter parallel application

Dimensions



Model Name	CPS SCA30KTL-DO	CPS SCA36KTL-DO-480
DC Input		
Nominal DC Input Power	31kW	37kW
Max. DC Input Power for each MPPT	16kW	19kW
Max. DC Input Voltage	1000Vdc	1000Vdc
Operating DC Input Voltage Range	300-900Vdc	
Start-up DC Input Voltage / Power	330V/300W	
Nominal DC Input Voltage	630Vdc	710Vdc
Number of MPP Trackers	2	
MPPT Voltage Range	480-800Vdc	540-800Vdc
Max. Input Current	2 x 32A	2 x 34A
Number of DC Inputs	4 strings x 2	
DC Disconnection Type	Integrated DC switch	
AC Output		
Rated AC Output Power	30kW	36kW
Max. AC Output Power	30kW	36kW
Rated Output Voltage	230/400Vac	277/480Vac
Output Voltage Range*	320-460Vac	422-528Vac
Grid Connection Type	3Φ/PE	3Φ/PE
Max AC Output Current	43.3A	43.3A
Rated Output Frequency	50Hz/60Hz	
Output Frequency Range*	47-53Hz/57-63Hz	
Power Factor	>0.99 (±0.8 adjustable)	
Current THD	<3%	
AC Inrush Current	149A Peak/211us	
Maximum Output Fault Current	L-N/PE:100A Peak@320ms;56.6A RMS@20ms; L1/L2/L3 158A Peak@992ms; 70.4A RMS@20ms	
System		
Topology	Transformerless	
Max. Efficiency	98.4%	98.6%
Euro Efficiency	98.0%	98.1%
Stand-by / Night Consumption	<20W/<2W	
Protective Class	I	
Overvoltage Category	PV(II), Mains(III)	
Environment		
Protection Degree	IP65	
Cooling	Variable speed cooling fans	
Operating Temperature Range	- 25°C to +60°C (derating from +45°C)	
Operating Humidity	0-100%, non-condensing	
Operating Altitude	4000m (derating from 2000m)	
Display and Communication		
Display	LCD+LED	
Communication	Standard: RS485, USB, Mulit-function Relay	Option: Ethernet, Zigbee
Mechanical Data		
Dimensions (WxHxD) (mm)	600x1000x230	
Weight (kg)	50 (Inverter)+5 (Wiring Box)	
Safety		
Safety and EMC Standard	LVD: 2006/95/EC EMC: 2004/108/EC, IEC/EN 62109-1: 2010, IEC/EN 62109-2: 2011; IEC/EN61000-6-2: 2005, IEC/EN61000-6-3: 2007	
Grid Standard	BDEW; VDE AR-N-4105/VDE 0126-1-1/A1; G83/1/1; G59/2; C10/11; NB/T32004; GB/T19964; NRS097;IEC61683;IEC60068;IEC62116;IEC61727	

* The "Output Voltage Range" and "Output Frequency Range" may differ according to specific grid codes.

* MAX recommended PV array power ≤1.3P(P for Rated AC output power), PV array power range depend on the type of installation and geographical location.