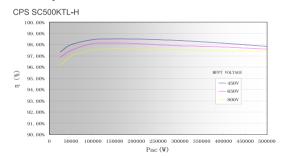




250kW & 500kW Grid-tied PV Inverter

CPS SC500KTL-H and CPS SC250KTL-H grid-tied PV inverters are TUV certified and are designed to be used in different types of commercial rooftop and utility scale PV systems. The DC input voltage range can reach up to 1000V allowing for more flexible the system configuration. Built using low loss magnetic material and advanced control algorithm, these inverters can reach a maximum efficiency of 98.5%.

Efficiency Curve



■ High Efficiency

- Max. efficiency of 98.5%, Euro efficiency of 98.3%
- ≥99.9% MPPT efficiency
- Space vector PWM
- Two paralleled modules topology, to improve light load efficiency and reliability (SC500KTL-H)

■ High Reliability

- Designed for reliability
- Comprehensive protection functions
- Double DSP + Double MCU realize multiple protection
- Advanced thermal design, fan speed control
- Embedded ground-fault circuit & Interrupter
- 5 years standard warranty; optional additional 15 years

98.00% 97. 00% 96 009 95. 00% 650V 93. 00%

Broad Adaptability

Multi-language display & Powerful communication interface

25000 50000 75000 100000 125000 150000 175000 200000 225000 250000

- High altitude application
- LVRT function

CPS SC250KTL-H

92.00%

91.00%

- Reactive power adjusting, active power derating
- External low-frequency transformer (Optional)
- Negative grounded mode is optional













Model Name	CPS SC250KTL-H	CPS SC500KTL-H
DC Input		
Nominal DC Input Power	255kW	510kW
Max. DC Input Power	275kW	550kW
Max. DC Input Voltage	1000	OVdc
Operating DC Input Voltage Range	450-820Vdc	
Start-up DC Input Voltage / Power	470V/3.5kW	
Nominal DC Input Voltage	600V	
MPPT Voltage Range	450-820Vdc	
Number of MPP Trackers	1	1
Number of DC Inputs (strings)	4	8
Max. Input Current	600A	1200A
DC Disconnection Type	Integrate	d Breaker
PV Array Configuration	Standard: Floating; Optional: Negative grounded	
AC Output		
Rated AC Output Power	250kW	500kW
Max. AC Output Power	275kW	550kW
Rated Output Voltage	270	Vac
Output Frequency Range	-	
Output Voltage Range	215-310Vac	
Grid Connection Type	3Ф.	/PE
Max AC Output Current	588A	1176A
Rated Output Frequency	50	Hz
Power Factor	>0.99 (±0.9 adjustable)	
Current THD	<3%	
AC Disconnection Type	Integrated Breaker	
System		
Topology	Transformerless	
Max. Efficiency	98.5%	
Euro Efficiency	98.0%	98.3%
Stand-by / Night Consumption	<10	0W
Environment		
Protection Degree	IP20	
Cooling	Variable speed cooling fans	
Operating Temperature Range	-20°C to +60°C	
Operating Humidity	0-95%, non-condensing	
Operating Altitude	4000m	
Display and Communication		
Display	LCD+LED	
Communication	RS485	
Mechanical Data		
Dimensions (WxHxD) (mm)	1600x2100x806	2800x2100x806
Weight (kg)	1100	1800
Safety		
Safety and EMC Standards	LVD: 2006/95/EC, EMC: 2004/108/EC, IEC/EN 62109-1: 2010, IEC/EN 62109-2: 2011; IEC/EN61000-6-2: 2005, IEC/EN61000-6-4: 2007	
Grid Standards	IEC61727: 2004	

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