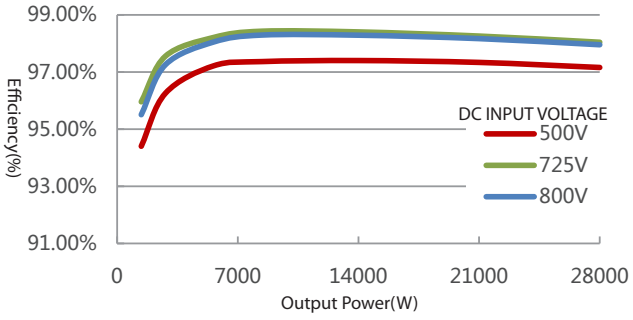
23/28kW, 1000Vdc String Inverters for North America

The medium power series of grid-tied, transformerless inverters help to accelerate the use of 1000Vdc and three phase string architecture for commercial and small ground mount utility applications. A NRTL approved, cost effective alternative to central inverters enabling BoS cost savings, high harvest performance and modular design building blocks. These models provide up to 98.6% conversion efficiency and wide operating window of 300-900Vdc and dual MPPT's for maximum cash-flow generation.

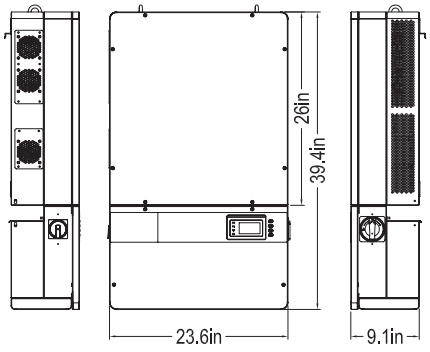
CPS SCA23KTL-DO/US-480
CPS SCA28KTL-DO/US-480

Efficiency Curve

CPS SCA28KTL-DO/US-480



Dimensions



High Efficiency

- Maximum efficiency of 98.6%, CEC efficiency of 98%
- 3-level technology and enhanced control mechanism to achieve high efficiency over wide load range
- 2 MPPTs to achieve higher system efficiency
- Transformerless design

High Reliability

- "Electrolyte-free design" for improved long-term reliability
- Standard warranty: 5 years, extension up to 20 years
- Advanced thermal design, with variable speed fans
- Ground-fault detection and interruption circuit
- AFCI Integrated (per UL1699B, Factory Enabled Option)

C SA US

FC This device complies with part 15 of the FCC Rules

Broad Adaptability

- NEMA 4 (IP65), outdoor application
- Utility interactive controls : Active power derating, reactive power control
- Separate wiring box design
- Integrated DC, AC disconnects
- Wide MPPT range for flexible string sizing
- 1000V Max. DC input voltage for flexible configuration
- 15 - 90 degree installation angle

Chint Power Systems America
7060 Koll Center Parkway, Suite 318 Pleasanton, CA 94566
Tel: 855-584-7168 Mail: AmericaSales@chintpower.com Web: www.chintpower.com/na

Model Name	CPS SCA23KTL-DO/US-480	CPS SCA28KTL-DO/US-480
DC Input		
Max. PV Power	31kW (15.5kW/MPPT)	38kW (19kW/MPPT)
Nominal DC Input Power	24kW	29kW
Max. DC Input Voltage	1000Vdc	
Operating DC Input Voltage Range	300-900Vdc	
Start-up DC Input Voltage / Power	330V/300W	
Number of MPP Trackers	2	
MPPT Voltage Range	480-800Vdc	500-800Vdc
Max. Input Current (Imp)	50A (25A per MPPT)	58A (29A per MPPT)
Max. Short Circuit Current (Isc)	82A (41A per MPPT)	96A (48A per MPPT)
Number of DC Inputs	8 inputs, 4 per MPPT	
DC Disconnection Type	Load rated DC switch	
AC Output		
Rated AC Output Power	23kW	28kW
Max. AC Output Power	23kW	28kW
Rated Output Voltage	480Vac	
Output Voltage Range*	422-528Vac	
Grid Connection Type	3Φ/N/PE	
Max AC Output Current	27.7A	33.7A
Rated Output Frequency	60Hz	
Output Frequency Range*	59.3-60.5Hz	
Power Factor	>0.99 (±0.8 adjustable)	
Current THD	<3%	
AC Disconnection Type	Load rated AC switch	
System		
Topology	Transformerless	
Max. Efficiency	98.6%	
CEC Efficiency	98.0%	
Stand-by / Night Consumption	<20W/<2W	
Environment		
Protection Degree	NEMA 4	
Cooling	Variable speed cooling fans	
Operating Temperature Range	-13°F to +140°F/- 25°C to +60°C (derating from +113°F/+45°C)	
Operating Humidity	0-95%, non-condensing	
Operating Altitude	13123.4ft/4000m (derating from 6561.7ft/2000m)	
Display and Communication		
Display	LCD+LED	
Communication	Standard: RS485 (Modbus)	
Mechanical		
Dimensions (WxHxD)	23.6×39.4×9.1in/600×1000×230mm	
Weight	122lbs/55kg	
Installation Angle	15 - 90 degrees from horizontal	
Safety		
Safety and EMC Standard	UL1741:2010, CSA-C22.2 NO.107.1-01, IEEE1547; FCC PART15	
Grid Standard	IEEE1547: 2003, IEEE1547.1: 2005	

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