

20kW Grid-tied PV Inverter for North America

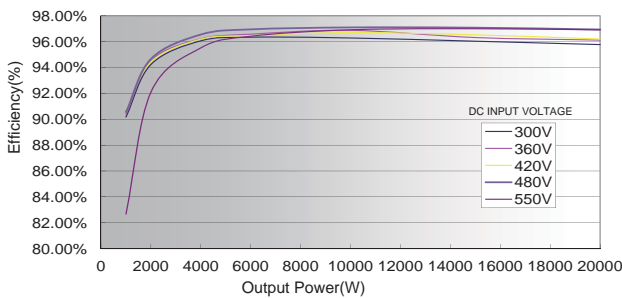
CPS is a fast growing global inverter manufacturer with over 500MW's of product operating in 18 countries. CPS is focused on delivering the best lifecycle value in the industry with performance leadership that will surprise you, cost leadership delivered with a world class supply chain and bankability from a diversified and global company that is here to support you and your investment.

The CPS SC20KTL-DO/US-480 grid tied transformer-less PV inverter is an ideal building block for 600VDC commercial three phase applications. The integrated and flexible wiring box eliminates the need for DC combiner boxes in the field. Dual, and independent, MPPT's enable granular power conversion and design flexibility. The unit is easily serviceable with a replacement unit in the field, significantly improving uptime over the life of the system.



CPS SC20KTL-DO/US-480

Efficiency Curve



Efficient and Flexible

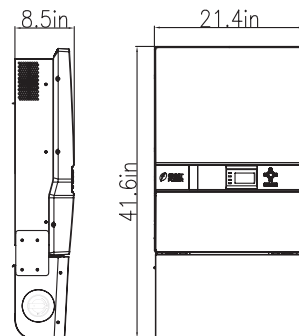
- Maximum efficiency of 97.3%
- Flat, award winning, efficiency curve
- Wide full load MPPT window
- Dual, independent MPPT channels increase energy harvest
- Broad operating temperature: -13°F - 140°F
- Supports 1.35 DC/AC ratio

Intelligent Features and Integration

- Flexible input stringing between 1-8 inputs
- Integrated AC/DC switch
- Light weight for rooftop installation
- Integrated GFCI
- Power factor (± 0.9) and curtailment controls
- Integrated Standard Modbus communication

Robust and Reliable

- NEMA 4 (IP65) for outdoor application
- Approved for direct sunlight installation
- Warranty up to 20 years
- Enhanced DSP and redundant system protection
- Advanced thermal design
- System HALT Tested (-94, +211°F)



Dimensions



Model Name	CPS SC20KTL-DO/US-480
DC Input	
Max. PV Power	27kW
Nominal DC Input Power	21kW
Max. DC Input Voltage	600Vdc
Operating DC Input Voltage Range	260-580Vdc
Start-up DC Input Voltage / Power	300V / 200W
Nominal DC Input Voltage	500Vdc
Number of MPP Trackers	2
MPPT Voltage Range	300-550Vdc
Max. Input Current (Imp)	70A (35A per MPPT)
Max. Short Circuit Current (Isc)	91A (45.5A per MPPT)
Number of DC Inputs and Fuses	8 fused conductors (4 per MPPT)
DC Disconnection Type	Switch
AC Output	
Rated AC Output Power	20kW
Max. AC Output Power	20kW
Rated Output Voltage	480Vac
Output Voltage Range	422-528Vac
Grid Connection Type	3Φ / N / PE (Optional Neutral Connection)
Max AC Output Current	27.3A
Rated Output Frequency	60Hz
Output Frequency Range	59.3-60.5Hz
Power Factor	>0.99 (Adjustable +/- 0.9)
Current THD	<3%
AC Disconnection Type	Switch
System	
Topology	Transformerless
Max. Efficiency	97.3%
CEC Efficiency	96.5%
Stand-by / Night Consumption	<20W / <2W
Environment	
Protection Degree	NEMA 4 (IP65)
Cooling	Variable speed cooling fans
Operating Temperature Range	-13°F to +140°F / - 25°C to +60°C (derating from +50°C / +122°F)
Operating Humidity	0-95%, non-condensing
Operating Altitude	6562ft / 2000m (derating from 4921ft / 1500m)
Display and Communication	
Display	LCD + LED
Communication	RS485 (Modbus)
Mechanical Data	
Dimensions (WxHxD)	21.4x41.6x8.5in / 544x1058x215mm
Weight	132lbs / 63kg
Safety	
Safety and EMC Standard	UL1741:2010, CSA-C22.2 NO.107.1-01, IEEE1547; FCC PART15
Grid Standard	IEEE1547: 2003, IEEE1547.1: 2005

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