







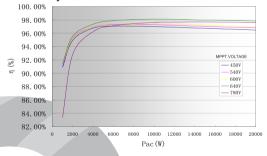
CPS SC20KTL-DO

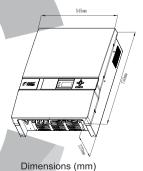
# 20kW Three Phase Grid-tied PV Inverter

The CPS SC20KTL-DO grid-tied PV inverter is designed for flexible use in different types of commercial rooftops and utility applications. 3-level technology, parallel switched MOSFET with IGBT and bypass strategy minimize power loss to achieve high efficiency at all load levels.

CPS SC20KTL-DO features small size, light weight and high power density. Flexible mounting modes make installation and maintenance easy and quick. IP65 protection degree allows versatile outdoor applications to save indoor installation space and cables. Enhanced DSP control, comprehensive protection functions and advanced thermal design enable the whole system with high reliability.

## Efficiency Curve





## ■ High Efficiency

- Max. efficiency of 98.1%, Euro efficiency of 97.5%
- ≥99.9% MPPT efficiency
- 3-level technology and enhanced control mechanism to achieve overall load efficiency

### High Reliability

- Designed for reliability and derating guide lines
- Comprehensive protection functions
- Enhanced DSP system
- Advanced thermal design, fan speed control
- Anti-islanding protection
- Embedded ground-fault circuit & interrupters
- Double MCU ensures multiple protection
- 5 years standard warranty; optional additional 15 years

#### ■ Broad Adaptability

- IP65 protection degree, outdoor application
- Multiple mounting modes, easy and quick installation
- High altitude application
- Reactive power adjusting, active power derating (Optional)
- 3rd Party Monitoring











RD1663 G59 ENEL C10/11 VDE-AR-N 4105 VDE0126-1-1/A1



Model Name	CPS SC20KTL-O/CN	CPS SC20KTL-DO
DC Input		
Nominal DC Input Power	20.5kW	20.5kW
Max. DC Input Power	22kW	22kW
Max. DC Input Voltage	850Vdc	850Vdc
Operating DC Input Voltage Range	430-800Vdc	430-800Vdc
Start-up DC Input Voltage / Power	485V/200W	485V/200W
Nominal DC Input Voltage	650V	650V
MPPT Voltage Range	500-800Vdc	500-800Vdc
Number of MPP Trackers	1	2
Number of DC Inputs (strings)	5	2x3
Max. Input Current	42A	2x21A
Max. Input Current per String	14A	14A
DC Disconnection Type	NA	Embedded switch
PV Array Configuration	Floating	
AC Output		
Rated AC Output Power	20kW	20kW
Max. AC Output Power	20kW	20kW
Rated Output Voltage	380Vac	400Vac
Output Frequency Range	300Vac	-
Output Voltage Range	320-460Vac*	
Grid Connection Type	320-400VαC 3Φ/N/PE	
Max AC Output Current	30A	
Rated Output Frequency	50Hz	50Hz/60Hz
Power Factor		(±0.9 adjustable)
Current THD	<2%	
AC Disconnection Type	-	
System		-
Topology	Tra	nsformerless
Max. Efficiency	98.1%	
Euro Efficiency	97.5%	
•	97.5% <20W	
Stand-by / Night Consumption  Environment		~20VV
		IP65
Protection Degree		
Cooling	Variable speed cooling fans -20°C to +60°C	
Operating Temperature Range		
Operating Humidity	0-95%, non-condensing 4000m	
Operating Altitude		4000111
Display and Communication		LODILED
Display	LCD+LED	
Communication	RS485	
Mechanical Data	-	42,7750,000
Dimensions (WxHxD) (mm)	543x750x220	
Weight (kg)	50	
Safety		
Safety and EMC Standards	CNCA/CTS 0004-2009A, CNCA/CTS 0006- 2010	LVD: 2006/95/EC EMC: 2004/108/EC, IEC/EN 62109- 1: 2010, IEC/EN 62109-2: 2011; IEC/EN61000-6-1/2: 2005, IEC/EN61000-6-3/4: 2007
Grid Standards	CNCA/CTS 0004-2009A	VDE-AR-N_4105: 2011, VDE 0126-1-1/A1, CEI-021, G59/2

<sup>\*</sup> The Output Voltage Range value may change according to different grid codes.

Information furnished is believed to be accurate and reliable. However, Chint Power assumes no responsibility for the consequences of use of such information nor for any infringement of patents or other rights of third parties which may result from its use. No license is granted by implication or otherwise under any patent or parent rights of Chint Power. Specifications mentioned in this publication are subject to change without notice. This publication supersedes and replaces all information previously supplied.