

CP series



Central Power  
solar inverter

Efficiency up to 98%

Low cost of ownership

Secure investment

Flexible design

Easy monitoring

**Maximum output  
for large installations**





# 'State-of-the-art' efficiency up to 98%!

The Mastervolt CP range offers Central Power solutions and completes the Mastervolt range of grid connected inverter products towards the high-end Megawatt size of applications.

## High energy production

The CP range distinguishes itself from most competitors through its 'state-of-the-art' efficiency reaching up to 98%. Even at high temperatures the CP product guarantees full output power. By using oversized components and power stacks the CP range offers you the maximum yield possible and low self consumption.

## Low cost of ownership

All essential components are easy to access for maintenance from the front of the inverter. Remote diagnostics and adjustments can be done anywhere and anytime using online monitoring.

## Secure investment

Mastervolt is renowned for high quality standards and innovative products. Our 20 years of experience in solar power solutions shows that you can rely on a solid partner. We offer you a variety of extended service & availability contracts, up to 20 years. All Mastervolt products are supported by local Mastervolt Service Partners, providing you with professional and fast service.

## Flexible design

The CP range is designed for adaptability. We offer a full range with or without transformer, high DC/low DC and 100-200 kW. A clear graphical display gives you access to all parameters at a glance. The Mastervolt CP range is even equipped with a datalogger with a 365 day memory, providing a full historical overview.

## More information?

Feel free to contact Mastervolt or one of our business partners, or visit [www.mastervolt.com](http://www.mastervolt.com)





# Mastervolt CP series supreme benefits

## Touch screen display

Access all parameters using the user friendly touch screen on the front.



## Emergency off button

Improves safety for operators.  
Auto turn off when opening.

## Sealed electronics

Electronics separated from cooling compartment.

## Additional inputs

Multiple inputs integrated within the cabinet (optional).



## Manage system performance

Optional DC distribution connection box with string current monitoring and/or branch current monitoring.



## All inclusive service

Maximize system availability with an optional all-inclusive warranty and service contract up to 20 years.

## Remote diagnostics

On-line monitoring using integrated datalogger for remote diagnostics of the system.



# Technical specifications CP series



**CP100TR**  
131400100



**CP200TR**  
131400200



**CP200TL**  
131420200



**CP140TR-LV**  
131430140

Article number

## GENERAL

Operating temperature	0 °C to 50 °C ambient (no power derating)			
Relative humidity	maximum 95% non-condensing			
Protection degree	IP20			
Safety class	class I			
Galvanic isolation	yes	yes	no	yes
Dimensions (HxWxD)	1900x1000x850 mm	1900x1400x850 mm	1900x1400x850 mm	1900x1400x850 mm
Weight	1050 kg	1330 kg	1000 kg	1200 kg
Product warranty	standard 2 years, optional extension up to 20 years			
Cooling system	active air cooling			

## SOLAR INPUT (DC)

Recommended PV power	115 kWp	230 kWp	230 kWp	165 kWp
Nominal input power	104 kW	208 kW	204 kW	147 kW
Maximum input power	115 kW	230 kW	230 kW	162 kW
Start of power conversion	530 W	900 W	350 W	700 W
Operating voltage range	450 - 900 V	450 - 900 V	450 - 900 V	300 - 600 V
MPP voltage range at nom. power	450 - 820 V	450 - 820 V	450 - 820 V	300 - 550 V
Maximum voltage	900 V	900 V	900 V	600 V
Number of inputs	1 standard, 5 optional			
Maximum current	250 A	500 A	500 A	500 A
MPP tracker	I	I	I	I
MPP efficiency	> 99.9%			
DC connection	tubular cable lugs for M8 bolts			

## GRID OUTPUT (AC)

Voltage	400 V, 3-phase	400 V, 3-phase	270 V, 3-phase	400 V, 3-phase
Nominal output power	100 kW	200 kW	200 kW	140 kW
Maximum output power	110 kW	220 kW	224 kW	154 kW
Nominal current	160 A	320 A	480 A	500 A
Frequency	45 - 65 Hz, country dependent			
Power Factor	> 0.99 at full power			
Harmonic distortion (THD)	< 3% at full power			
Standby power	< 30 W			
European efficiency (excl./incl. aux. supply)	96.5% / 96.3%	96.4% / 96.1%	97.5% / 97.3%	95.5% / 95.3%
Maximum efficiency	97.1%	97.0%	98.0%	96.20%
Partial efficiency (5/10/20/30/50/100%)	89.5/93.9/96.2/96.9/97.1/96.7%	89.99/94.5/96.32/96.9/97/96.2%	92.3/96/97.5/97.5/98/95.3%	89.8/93.5/95.7/96.1/96.2/95.3%
AC connection	tubular cable lugs for M8 bolts			

## MONITORING

User Interface	integrated touch screen display
Datalogger	365 days
External communication	Ethernet

## SAFETY FEATURES

Island protection	according to national grid requirement
Temperature protection	thermal switch-off at internal over temperature
Safety devices DC side	motor driven disconnect, Isolation resistance monitoring, overvoltage detection
Safety devices AC side	surge protection, over- undervoltage protection, overcurrent protection

## REGULATIONS AND DIRECTIVES

CE compliance	yes
Type approval	TÜV
EMC directive	89/336/EWG + 93/31/EWG
Emissions	EN61000-6-4
Grid quality requirements	VDEW compliant
Immunity	EN61000-6-2
LV directive	73/23/EWG
Electrical safety	EN50178
National grid interfacer requirements	VDEW compliant

Subject to alterations. For our complete product range please visit [www.mastervolt.com](http://www.mastervolt.com)

