

Conext Core XC series central inverters

High availability and enhanced efficiency from a provider you can trust

The Conext™ Core XC Series is a line of central inverters designed for high efficiency and flexibility for any PV panel type and installation. The Conext Core XC Series has peak efficiencies of 98.9% and its flexibility allows the inverter to be configured with voltage and power outputs up to 680 kW. In addition, the Conext Core XC Series is designed to allow for DC inputs up to 1000 Vdc for longer string lengths. It contains the latest grid management features to meet global utility requirements.

Why choose Conext Core XC?



True bankability

- Warranty from a trusted partner with 178 years of experience
- World leader in industrial power drives, UPS and electrical distribution
- Strong service infrastructure worldwide to support your global needs



Higher return on investment

- Best in class efficiency with 98.9% peak, 98.6% weighted EU
- Increased uptime due to high reliability and comprehensive global service network



Designed for reliability

- Robust design through rigorous Custom Reliability Testing



Flexible

- Variety of power outputs from 540 kW to 680 kW
- Full grid management features including voltage/frequency high and low ride through, reactive current support, VAR control, and frequency based active power control
- Configurable firmware to allow for easy adjustments to changing utility requirements



Easy to service

- Integrated switchgear using Masterpact NW (AC circuit breaker, DC switch)
- Full suite of alarms and troubleshooting tools allow for remote diagnostics



Easy to install

- Compact footprint for easy integration into compact enclosures
- Integrated AC and DC switchgear standard
- In-built hardware for 1000 VDC start-up and LVRT features



Product applications



PV power plants centralised



Commercial grid-tie centralised

Device short name	XC540	XC630	XC680
Electrical specifications			
Input (DC)			
Input voltage range, MPPT	440 - 800 V (at PF=1)	510 - 800 V (at PF=1)	550 - 800 V (at PF=1)
Static MPPT accuracy	>99.9%	>99.9%	>99.9%
	5% to 100% of nominal power	5% to 100% of nominal power	5% to 100% of nominal power
	Entire MPP (maximum power point) range; PV generator Fill Factor from 60-80%	Entire MPP (maximum power point) range; PV generator Fill Factor from 60-80%	Entire MPP (maximum power point) range; PV generator Fill Factor from 60-80%
Input voltage range, operating	440 - 885 V	510 - 885 V	550 - 885 V
Max. input voltage, open circuit	1000 V	1000 V	1000 V
Max. input current	1280 A	1280 A	1280 A
Max. input short circuit current	2000 A	2000 A	2000 A
Output (AC)			
Nominal output power	540 kVA	630 kVA	680 kVA
Real power	540 kW (at PF=1)	630 kW (at PF=1)	680 kW (at PF=1)
Reactive power range	+ / - 540 kVAR	+ / - 630 kVAR	+ / - 680 kVAR
Output voltage	300 V	350 V	380 V
Frequency	50 / 60 Hz	50 / 60 Hz	50 / 60 Hz
Nominal output current	1040 A	1040 A	1040 A
Power factor settable range (Ppf dispatch)	0.8 to 1.0 leading and lagging	0.8 to 1.0 leading and lagging	0.8 to 1.0 leading and lagging
Power factor range (PQ dispatch)	0 to 1 leading and lagging	0 to 1 leading and lagging	0 to 1 leading and lagging
Harmonic distortion	< 3% at rated power	< 3% at rated power	< 3% at rated power
Efficiency (to IEC61683)			
Maximum (@ 50Hz)	98.5%	98.7%	98.9%
European (@ 50Hz)	98.3%	98.4%	98.6%
CEC (@ 60Hz)	98.5%	98.5%	98.7%
General specifications			
Power consumption, night time	< 100 W	< 100 W	< 100 W
IP degree of protection	IP20	IP20	IP20
Enclosure material	Steel	Steel	Steel
Seismic	IEEE-693-2005 High performance level*, ICC-ES AC156-2012**		
Product weight	1590.0 kg (3505.0 lb)	1590.0 kg (3505.0 lb)	1590.0 kg (3505.0 lb)
Product dimensions (H x W x D)	208.5 x 240.0 x 66.0 cm (82.0 x 94.5 x 26.0 in)	208.5 x 240.0 x 66.0 cm (82.0 x 94.5 x 26.0 in)	208.5 x 240.0 x 66.0 cm (82.0 x 94.5 x 26.0 in)
Ambient air temperature for operation	-10°C to 45°C (14°F to 113°F) full power. Power derating to 50°C		
Operating altitude	1000 m, derating for higher altitudes		
Relative humidity	0 to 95% non-condensing		
Features and options			
Type of cooling	Temperature-dependent forced convection cooling		
Display type	LCD multifunction removable display standard		
Communication interface	RS485/Modbus standard		
AC/DC disconnect	Load break rated DC disconnect and AC circuit breaker standard		
Ground fault detection/interruption	Optional isolation monitoring relay or GFDI with circuit breaker		
Sub-array combiner	Optional external combiners with various quantities and trip ratings		
Regulatory approvals			
Conext Core XC Series are CE marked for the EMC Directive (EN61000-6-2 and EN61000-6-4) and Low Voltage Directive (EN50178)			
Conext Core XC Series complies			
	French order of April 23, 2008, IEC 61727, PO 12.3 (Spain), US-MV (FERC 661/661A, FRCC, WECC, NERC PRC-024-1), BDEW (Germany), RD1663/200 (Spain), RD661/2007 (Spain), CEI-016 (Italy), ANRE Order 30/2013 (Romania), PEA (Thailand)		

Specifications are subject to change without notice. Other input voltage windows and power outputs available.
 *ZPA=1.0 g 2% damping, **Seismic demand spectrum (SDS) of 1.78g and z/h of 0 Ip =1.5 (ground mounted equipment)