# Greater reliability and flexibility for large solar installations

**Conext Core XC** central inverters





### Introducing the Conext Core XC central inverter

# A new line of central inverters designed for high efficiency and compatibility with any PV panel type and installation

The Conext<sup>™</sup> Core XC has a peak efficiency of 98.9 per cent and its flexibility allows the inverter to be configured with voltage and power outputs up to 680 kVA. 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.



### **Options**

- Insulation monitoring systems and positive or negative grounding kits
- PV Box solution with multiple inverters and medium voltage transformers
- Fused array recombiners associated to inverter enclosure
- Sub-array string monitoring
- Remote monitoring and control options
- Preventive maintenance programs
- Warranty extensions and service contracts with uptime guarantees



# Why select the **Conext Core XC** central inverter?



### True bankability

- Warranty from a trusted partner with over 175 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

- Increased uptime due to high reliability and comprehensive global service network
- Standard and extended warranties, service plans, and uptime guarantees from a trusted partner



### Designed for reliability

- Multiple environment over stress testing (MEOST) conducted to identify potential weaknesses and strengthen Conext Core XC
- Based on Schneider Electric Power Drives design and hardware, with over 550MW in field



#### **Flexible**

- Variety of power outputs, from 540 kVA to 680 kVA
- Global design suitable for all interconnection standards
- Full grid management features
- Configurable firmware to allow for easy adjustment to changing utility requirements



### Easy to service

- Integrated switchgear provides load and short-circuit break capability and isolation for servicing
- Full suite of alarms and troubleshooting tools allows for remote detection and analysis of issues before arriving on site

# Applications for the Conext Core XC central inverter

# Conext Core XC inverters bring greater reliability and efficiency to large solar installations

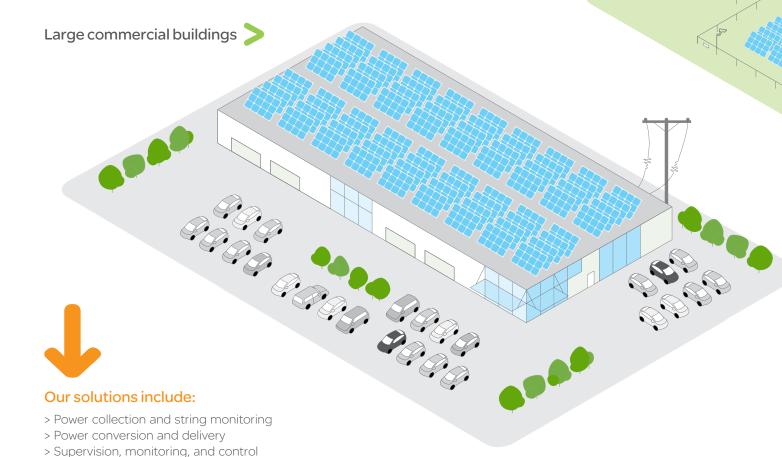
Conex Core XC is designed and rigorously tested to maximise reliability. It's also flexible enough to meet local requirements, wherever you are.

Suited for large commercial applications of over 500 kW and PV power plant applications of over 1 MW, our new inverter seamlessly integrates with other Schneider Electric™ products so you get a comprehensive, bankable photovoltaic solution from a single provider.

### Proven solutions for large solar applications

Schneider Electric solutions for large commercial buildings and centralised PV power plants combine proven products with the kind of support only a global company can provide.

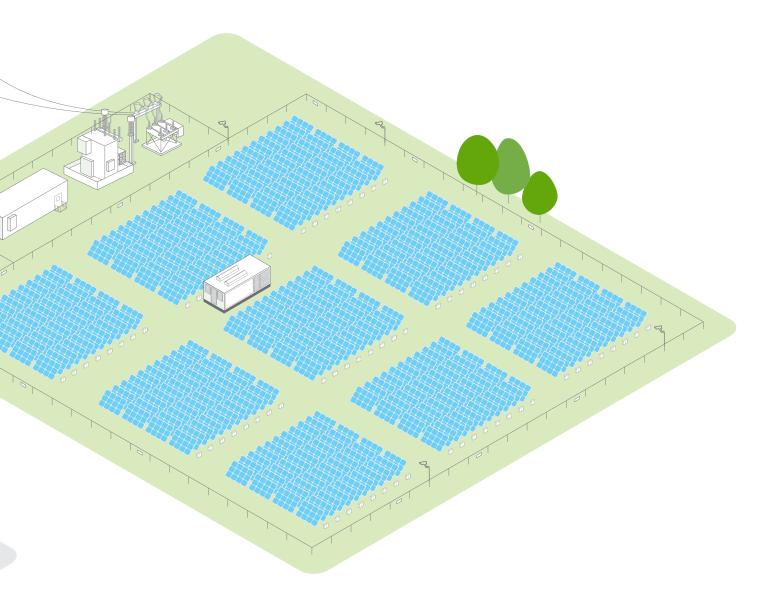
Our balance-of-system solutions include everything you need to efficiently distribute and manage locally generated solar energy, from panel DC output to the grid connection.



> Site security

### Centralised PV plants







### Key benefits:

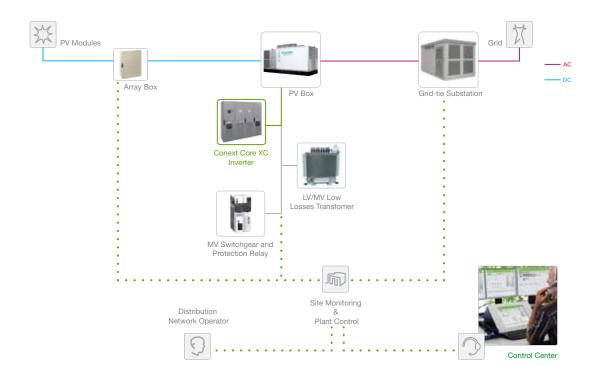
- > Low cost of installation
- > Low cost of maintenance
- > High energy harvest
- > Protection of the value of your assets

# Configurable architectures for large commercial buildings and centralised PV plants





Conext Core XC is a key element of the power conversion chain within a large commercial building or centralised PV plant. Here are some of our other easy-to-integrate PV solution bricks:





#### Key benefits you get with a Schneider Electric PV solution package:

- > Seamless solution from a single, bankable supplier
- > Optimised package to reach the lowest possible LCOE
- > Simplified project planning and reduced installation and commissioning costs
- > Adaptability to customer requirements and local standards
- > Upgradable grid interactive features at inverter and plant level
- > Global service and support infrastructure

## **Technical specifications**

| Device short name                     | XC 540   | XC 630   | XC 680   |
|---------------------------------------|--|--|--|
| Electrical specifications             |  |  |  |
| Input (DC)                            |  |  | -  |
| Suggested photovoltaic power          | 621 kW   | 725 kW   | 782 kW   |
| Input voltage range, MPPT             | 440 - 800 V (at PF=1)  | 510 - 800 V (at PF=1)                              | 550 - 800 V (at PF=1)                              |
| Input voltage range, operating        | 440 - 850 V  | 510 - 850 V  | 550 - 850 V  |
| Max. input voltage, open circuit      | 1000 V   | 1000 V   | 1000 V   |
| Max. input current                    | 1280 A   | 1280 A   | 1280 A   |
| Output (AC)                           |  |  |  |
| Nominal output power                  | 540 kVA  | 630 kVA  | 680 kVA  |
| 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                          | 0.8 to 1.0 lead / lag  | 0.8 to 1.0 lead / lag                              | 0.8 to 1.0 lead / lag                              |
| 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  |
| 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<br>(82.0 x 94.5 x 26.0 in)               | 208.5 x 240.0 x 66.0 cm<br>(82.0 x 94.5 x 26.0 in) | 208.5 x 240.0 x 66.0 cm<br>(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                                      | s with various quantities and trip                 | o ratings  |
| Regulatory approvals                  |  |  |  |

Conext Core XC is CE marked for the EMC Directive (EN61000-6-2 and EN61000-6-4) and Low Voltage Directive (EN50178)

Conext Core XC complies with the 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 - Pending)



Discover more about our solar solutions Visit www.schneider-electric.com/solar and download our FREE Bankability Brochure

See our solutions on YouTube at www.youtube.com/schneidersolar

### Make the most of your energy<sup>sм</sup>

Schneider Electric Industries SAS

Head Office 35 rue Joseph Monier 92500 Rueil Malmaison Cedex- France Tel.: +33 (0)1 41 29 70 00 www.schneider-electric.com

