

# Three-Phase C&I on-grid inverter



## X3-FORTH PLUS

75kW / 120kW / 125kW  
136kW / 150kW



### High Efficiency

- Up to 99% efficiency
- 200% PV oversizing
- 180~1000V, up to 65A per MPPT
- Reliable up to 5000m altitude



### Assured Safety

- IP66 rating
- Remote settings and upgrades
- 24-hour monitoring
- Automatic tripping DC switch



### Intelligent Design

- Fan self-cleaning
- Night-time SVG for voltage regulation
- AC terminal over temperature detection
- Optional PLC, LED/LCD/APP for information



### Flexible Adaptability

- Optional arc-fault circuit interrupter (AFCI)
- SPD Type II (Type I+II optional)
- -25°C to +60°C (derating above 50°C)
- 6 MPPTs, 4 strings per MPPT for precise power

	X3-FTH-75K-P-LV	X3-FTH-120K-P	X3-FTH-125K-P	X3-FTH-136K-P	X3-FTH-150K-P
<b>PV INPUT</b>					
Max. recommended PV array power	150 kWp	240 kWp	250 kWp	272 kWp	300 kWp
Max. PV input voltage <sup>①</sup>	1000 V	1100 V	1100 V	1100 V	1100 V
Nominal PV input voltage	360 V	580 V / 600 V	580 V / 600 V	580 V / 600 V	580 V / 600 V
Operating voltage range	200 ~ 1000 V	200 ~ 1000 V	200 ~ 1000 V	200 ~ 1000 V	200 ~ 1000 V
MPPT voltage range <sup>②</sup>	180 ~ 800 V	180 ~ 800 V	180 ~ 800 V	180 ~ 800 V	180 ~ 800 V
Start-up voltage	200 V				
No. of MPP trackers / Strings per MPP tracker	3 / 4	6 / 4			
Max. input current per MPPT	65 A				
Max. input short circuit current per MPPT	82 A				
<b>AC OUTPUT</b>					
Rated output power	75 kW	120 kW	125 kW	136 kW	150 kW
Rated output current	196.9 A	181.8 A / 174 A	189.4 A / 181.2 A	206.6 A / 196.3 A	227.3 A / 217.4 A
Max. output apparent power	75 kVA	132 kVA	137.5 kVA	150 kVA	165 kVA
Max. output continuous current	196.9 A @ 220 V	200.6 A @ 380 V	209 A @ 380 V	228 A @ 380 V	250.7 A @ 380 V
Max. short circuit current	500 A				
Nominal AC voltage	3 / (N) / PE, 127 / 220 V	3 / (N) / PE, 220 / 380 V, 230 / 400 V			
Nominal AC frequency	50 Hz / 60 Hz				
AC frequency range <sup>③</sup>	50 ± 5 Hz / 60 ± 5 Hz				
Adjustable Power Factor range	~ 1 (0.8 lagging to 0.8 leading)				
THDi (rated power)	< 3%				
<b>EFFICIENCY</b>					
Max. efficiency	98.6%				
European efficiency	98.2%				
<b>ENVIRONMENT LIMIT</b>					
Ingress protection	IP66				
Operating ambient temperature range	-25 ~ 60°C				
Max. operating altitude	4000 m				
Relative humidity	0 ~ 100% RH (condensing)				
Overvoltage Category	Mains: III, PV: II				
<b>GENERAL</b>					
Dimensions (W × H × D)	1082 × 724 × 373 mm				
Net weight	99.8 kg				
Cooling concept	Smart cooling				
Communication interfaces	RS485, Optional: PLC, Pocket WiFi / LAN / 4G				
Power consumption (night)	< 10 W				
Topology	Non-isolated				
Certificates and approvals	NB/T 32004, IEC 61727, IEC 62116, VDE4110, VDE4105, EN50549, NRS097, G99, RD1699, PPDS2020, CEIO-21, CEIO-16, VFR 2019				
<b>PROTECTION</b>					
Protections	Over / under voltage protection, DC isolation protection, DC reverse-polarity protection, Grid monitoring, DC injection monitoring, Back feed current monitoring, Residual current detection, Over temperature protection, Arc-fault circuit interrupter (AFCI)				
Active anti-islanding method	Frequency shift				
Surge protection (DC / AC)	DC: Type II (Optional Type I + II), AC: Type II				
AC auxiliary power supply (APS)	Built-in				
Anti-PID	Optional				

①The maximum input voltage is the upper limit of the DC voltage. Any higher input DC voltage would probably damage inverter

②Input voltage exceeding the MPPT voltage range may triggers inverter protection

③The AC frequency range may vary from different country codes