

X3-FORTH

THREE-PHASE
ON-GRID INVERTER

80~150kW



Features

More energy harvest

- Maximum efficiency up to 99%
- 180~1000Vdc MPPT voltage range
- Maximum 12 MPPTs, 2 strings per MPP tracker
- 150% PV oversizing input, 110% overloading output
- Maximum 32A MPPT current, 16A per string

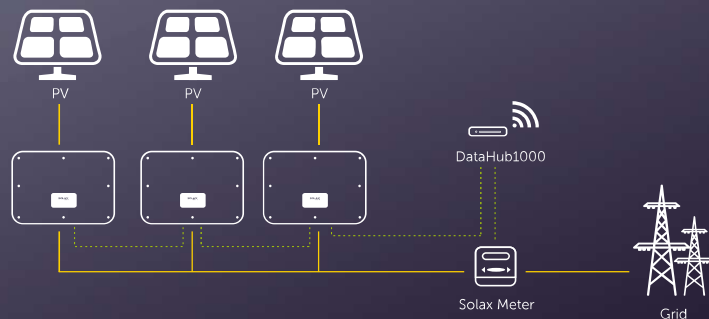
Safety & Reliability

- IP66 protection level
- AFCI protection (Optional)
- AC terminal temperature detection
- Both AC & DC SPDs (Type II) inside, Type I SPD is optional

Intelligence for easy maintenance and economy

- Built-in export power control
- Remote setting and upgrading
- 24 hours operation monitoring
- Smart I-V Curve Diagnosis supported
- SVG functional supported (Optional)
- Aluminium AC cable connection available
- Power line communication (PLC)(Optional)
- Fuse free design with smart string current monitoring
- Smart air cooling technique results in long lifetime of fans
- Advanced heat dissipation technology makes the system more than 5% lighter and smaller

SOLUTION DESIGN



X3-FORTH

THREE PHASE

X3-FTH-80K X3-FTH-100K X3-FTH-110K X3-FTH-120K X3-FTH-125K X3-FTH-136K-MV X3-FTH-150K-MV

DC INPUT							
Max. PV array input power [kWp]	120	150	165	180	188	204	225
Max. PV input voltage [V]	1100	1100	1100	1100	1100	1100	1100
Startup voltage [V]	200	200	200	200	200	200	200
Nominal input voltage [V]	580/600	580/600	580/600	580/600	580/600	730/785	730/785
MPP tracker voltage range [V]	180~1000	180~1000	180~1000	180~1000	180~1000	180~1000	180~1000
No. of MPP trackers	9	9	9	12	12	12	12
Strings per MPP tracker	2	2	2	2	2	2	2
Max. input current per MPPT [A]	32	32	32	32	32	32	32
Max. short circuit current per MPPT [A]	46	46	46	46	46	46	46
AC OUTPUT							
Nominal AC output power [kW]	80	100	110	120	125	136	150
Nominal AC output current [A]	121.3/116	151.6/145	166.7/159.5	181.9/174	189.4/181.2	157.1/145.4	173.2/160.4
Max. AC output apparent power [kVA]	88	110	121	132	132	149.6	165
Max. AC output current [A]	133.4/127.6	166.7/159.5	183.4/175.4	200/191.3	200/191.3	172.8/160	190.6/176.5
Nominal AC voltage[V]							
Nominal grid frequency [Hz]	220/380, 230/400, 3/N/PE, 3/PE					500/540.3P3W+PE	
Displacement power factor	0.8 leading-0.8 lagging						
THDi (Rated power) [%]	<3						
SYSTEM DATA							
MPPT efficiency [%]	99.9						
Max. efficiency [%]	98.6	98.6	98.6	98.6	98.6	99.0	99.0
Ingress protection	IP66						
Operating temperature range [°C]	-25~+60 (Derating at 45)						
Max. operation altitude [m]	4000 (Derating above 3000)						
Relative humidity [%]	0~100						
Dimensions[WxHxD] [mm]	985x660x327.5						
Weight [kg]	83	83	83	87	87	87	87
Cooling concept	Smart fan cooling						
Communication interfaces	RS485 / (Optional: Pocket Wifi/4G) / Bluetooth / USB						
PROTECTION							
Over/under voltage protection	YES						
DC isolation protection	YES						
Grid monitoring	YES						
DC injection monitoring	YES						
Residual current detection	YES						
Anti-islanding protection	YES						
String fault detection	YES						
SPD (DC/AC)	Type II / Type II						
Output terminals over temperature detection	YES						
STANDARD							
Safety	IEC/EN 62109-1; IEC/EN 62109-2; NB/T 32004						
EMC	IEC/EN 61000; NB/T 32004						
Certification	EN 50549; AS4777.2; VDE4105; IEC 62116; IEC 61683; IEC 60068; EN 50530; NB/T 32004						

~V2.4. Information may be subject to modify without notice.630.00001.00