

Three-phase On-grid String Inverter

SPI250K-B-H X2/X2P Series



High efficiency

- Advanced three-level technology max. efficiency 99.02%
- 12 MPPT design, compatible with bifacial PV panel
- Anti-PID and PID recovery function



Safe and reliable

- IP66 and C5 optional anti-corrosion grade, intelligent fan with IP68 protection
- Redundant power supply by AC and DC
- Built-in AC/DC SPD protection



Intelligent management

- Intelligent I-V and fault wave recording, quick failure analysis
- Smart online upgrade, easy for system maintenance
- Capacitor detection and life prediction reduce the failure risk



System optimization

- DC 2 in 1 connection enabled and compatible with AL AC cables
- PLC communication optional, save cable investment
- Support night SVG and quick response



Technical Specification

Items	SPI250K-B-H X2	SPI250K-B-H X2P
DC Input (PV)		
Max. PV input voltage	1500Vdc	
Rated input voltage	1080Vdc	
Max. PV input current	12×30A	6×60A
No. of MPPTs	12	6
No. of PV strings per MPPT	2	3
MPPT voltage range	500-1500Vdc	
Starting voltage	550Vdc	
DC switch	Yes	
AC Output (On-grid)		
Rated AC output power	250kW@30°C, 225kW@40°C, 200kW@50°C	
Max. output power	250kVA	
Rated AC output voltage	800Vac	
Rated output current	180.4A	
Max. output current	180.4A	
Rated grid frequency	50Hz/60Hz	
Grid frequency range	45-55Hz/55-65Hz	
Power factor	>0.99 (rated power)	
Adjustable power factor	0.8 (leading)-0.8 (lagging)	
THDi	<3% (rated power)	
Efficiency		
Max. efficiency	99.02%	
European efficiency	98.80%	
MPPT efficiency	99.90%	
Function and protection		
Anti-islanding	Yes	
DC (PV) reversed connection	Yes	
AC short circuit protection	Yes	
Temperature protection	Yes	
Surge protection	DC Type II & AC Type II	
AFCI function	Yes (optional)	
Integrated PID function	Yes (optional)	
IV curve scan and diagnosis	Yes (optional)	
Support night SVG function	Yes (optional)	
General		
Dimensions (W×H×D)	1100*760*361mm	
Weight	117kg	
IP grade	IP66	
Self-consumption at night	<2W	
Cooling type	Intelligent forced air cooling	
Altitude	4000m (>3000m derating)	
Operating temperature	-35-60°C	
Relative humidity	0-100%	
Display	LED+APP	
DC terminal	MC4 Terminal	
AC terminal	OT Terminal	
Installation method	Wall-mounted	
Communication	RS485, PLC (optional),WIFI (optional)/4G (optional),Bluetooth (optional)	
Compliance	EN 62109-1/2, IEC 62109-1/2, EN IEC 61000-6-2/4, IEC 62116, IEC 61727, CEI 0-16, EN 50549-2, NC RfG	

- Specifications are subject to change without prior notice.