

# Three-phase On-grid String Inverter

SPI50K-BHV/SPI60K-BHV/SPI70K-BHV/SPI80K-BHV



## Features

### High Efficient

- Tri-level circuit topology, maximum conversion efficiency 99%
- Multi-MPPT design, strong complex installation environment adaptability
- 45°C 1.1 times the long-term overload, 50°C full load operation

### Safe and Reliable

- Outdoor IP65 design, no derating below 3000m altitude
- IP68 intelligent fan, low temperature rise, long life
- PID protective function, avoid electrical shock

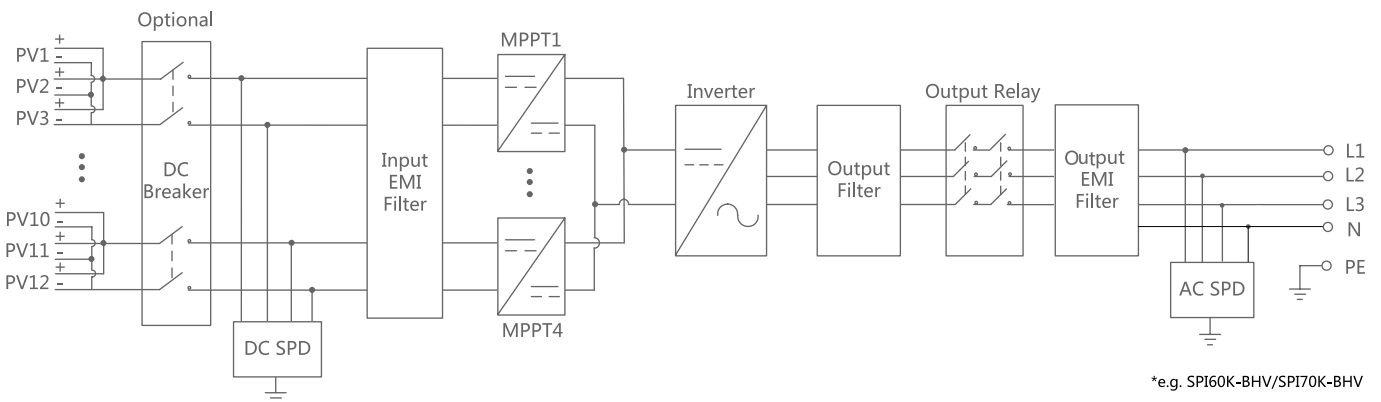
### Intelligent Management

- Intelligent fault wave recording, quick failure analysis
- I&V Intelligent diagnosis, accurate identification and positioning of abnormal PV panels
- Intelligent online upgrade function, easy upgrade and maintain
- Support RS485, PLC and other communication

### Grid Friendly

- Grid-connected current harmonics <3%, green adapts to grid
- Ultra wide grid voltage range, with LVRT function

## Function Diagram



## Technical Specification

Items	SPI50K-BHV	SPI60K-BHV	SPI70K-BHV	SPI80K-BHV
<b>DC Input</b>				
Max. PV input voltage	1100Vdc	1100Vdc	1100Vdc	1100Vdc
Rated PV voltage	740Vdc	710Vdc	800Vdc	800Vdc
Max. PV input current	90A (3×33.5A)	120A (4×30A)	150A (4×30A)	176A (4×44A)
No. of MPPTs	3	4	4	4
No. of PV strings per MPPT	3/3/3	3/3/3/3	3/3/3/3	4/4/4/4
MPPT voltage range	300V~1000V			
Starting voltage	300Vdc			
<b>AC Output</b>				
Rated AC output power	50kW	60kW	70kW	80kW
Max. output power	55kW	66kW	77kW	88kW
Rated AC output voltage	500Vac	480Vac	540Vac	540Vac
Rated output current	63.5A	79.4A	82.3A	94.1A
Max. output current	63.5A	63.5A	63.5A	63.5A
Rated grid frequency	50Hz/60Hz			
Grid frequency range	45~55Hz/55~65Hz			
Power factor	>0.99 (full load)			
Adjustable power factor	0.8 (leading)-0.8 (lagging)			
THDi	<3% (nominal power)			
<b>Efficiency</b>				
Max. efficiency	99%	99%	99%	99%
European efficiency	98.49%	98.49%	98.49%	98.5%
<b>Protection</b>				
Anti-islanding	Yes			
DC reversed connection	Yes			
AC short circuit protection	Yes			
Temperature protection	Yes			
Surge protection	Yes			
PV fault detect	Yes			
DC switch	Optional			
<b>General</b>				
Dimensions (W×H×D)	600×860×294mm			
Weight	68kg			75kg
IP grade	IP65			
Noise level	<65dB			
Self-consumption at night	<1W			
Cooling type	Intelligent forced air cooling			
Altitude	5000m (>3000m derating)			
Operating temperature	-25°C~+60°C			
Relative humidity	0~95% (Non-condensation)			
Display	LCD+LED			
Communication	RS485/PLC			
DC terminal	MC4 Terminal			
AC terminal	OT Terminal			
Installation method	Wall-mounted			
Standard	EN62109-1, EN62109-2, NB/T32004, AS4777.2, EN 61000-6-2, EN 61000-6-4, DIN VDE0126, UTE C15-712-1, VFR2014, ERDF-NOI-RES_13E, IEC61727, IEC62116, GB/T 19964-2012			

\*Specifications are subject to change without prior notice.