

Smart On-grid

String Inverter Catalog

PV+ESS for the future

Stock code

002335.SZ

Kehua Digital Energy

40GW+

annual production

31GW+

global PV installation

NO.9

solar inverter brands used in term-loan financed projects (Bloomberg)

NO.8

PV inverter market share in Asia (IHS Markit 2022)

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enterprise in the world.

ABOUT US

Xiamen Kehua Digital Energy Tech Co., Ltd. (hereinafter referred to as Kehua), rooted

in power electronics technology, has diversified solutions and rich project experience in photovoltaics, energy storage, microgrid, wind power and integrated energy services.

With global awareness of carbon neutrality, Kehua is working with its partners in more than 30 countries around the world to promote the transformation of energy structure with technology, so that clean energy can become a force influencing the world. We provide comprehensive

services such as products and equipment, system integration, overall scheme, planning and design, engineering construction, operation and maintenance for customers all over the world,

and are committed to becoming an excellent integrated clean energy service technology

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Kehua Energy Cloud

Single-phase On-grid String Inverter

SPI3000~6000-B2 Series



High Yield

- High-efficiency inverter topology ensures annual power generation
- Advanced control algorithms and high adaptation ability to the grid, improving the stability of power generation system



Safe and reliable

- IP65 for outdoor application
- Integrated DC&AC SPD



Easy O&M

- Intelligent WiseSolar Plus APP+ cloud platform provides all-round visual O&M
- Support remote intelligent upgrade service can reduce O&M cost



Household friendly

- Small size, easy to install and use
- Natural cooling, ensuring low environmental noise



Technical Specification

Items	SPI3000-B2	SPI3600-B2	SPI4000-B2	SPI4600-B2	SPI5000-B2	SPI6000-B2	
DC Input (PV)		I	<u> </u>	<u> </u>			
Max. PV power (recommend)	3.9kWp	3.9kWp 4.68kWp 5.2kWp 5.98kWp 6.5kWp					
Max. PV input voltage	0.000	4.00KVVP		Vdc	0.5877	7.8kWp	
Rated input voltage		360Vdc					
Max. PV input current				/13A			
No. of MPPTs				2			
No. of PV strings per MPPT			-				
MPPT voltage range				550Vdc			
Starting voltage				Vdc			
DC switch				es			
AC Output (On-grid)							
Rated AC output power	3.0kW	3.6kW	4.0kW	4.6kW	5.0kW	6.0kW	
Max. output power	3.3kVA	3.96kVA	4.4kVA	5.06kVA	5.5kVA	6.0kVA	
Rated AC output voltage		I	220Vac	/230Vac	I		
Grid voltage range			184~2	76Vac			
Rated output current	13.0A	15.7A	17.4A	20.0A	21.7A	26.0A	
Max. output current	14.3A	17.2A	19.1A	22.0A	23.9A	26.0A	
Rated grid frequency		1	50/6	0Hz	1		
Grid frequency range			45~55Hz	/55~65Hz			
Power factor			>0.99 (rat	ed power)			
Adjustable power factor				~0.8 (lagging)			
THDI		<3% (rated power)					
Efficiency*							
Max. efficiency	98.10%			98.30%			
European efficiency	97.70%			97.90%			
MPPT efficiency			99.9	90%			
Function and protection							
Anti-islanding			Ye	es			
DC (PV) reversed connection			Ye	es			
AC short circuit protection			Ye	es			
Temperature protection			Ye	es			
Surge protection		DC	Type II & AC Typ	e III (Type II optic	nal)		
Zero-export function			Yes (or	ptional)			
General							
Dimensions (W*H*D)			360*420	*125mm			
Weight			11.	5kg			
IP grade			IP	65			
Self-consumption at night			<1	W			
oen-consumption at myrit	Natural cooling						
		4000m (>2000m derating)					
Cooling type			4000m (>200	om derading)			
Cooling type Altitude			`	~60°C			
Cooling type Altitude Operating temperature			-30°C				
Cooling type Altitude Operating temperature Operating humidity			-30°C	~60°C			
Cooling type Altitude Operating temperature Operating humidity Display			-30°C 0~1 LCD-	~60°C 00%			
Cooling type Altitude Operating temperature Operating humidity Display DC terminal			-30°C 0~1 LCD- MC4 To	~60°C 00% +LED			
Cooling type Altitude Operating temperature Operating humidity Display DC terminal AC terminal			-30°C 0~1 LCD- MC4 To Plug and pla	~60°C 00% +LED erminal			
Cooling type Altitude Operating temperature Operating humidity Display DC terminal AC terminal Installation method Communication		RS485, DR	-30°C 0~1 LCD- MC4 To Plug and pla	~60°C 00% +LED erminal ay connector iounted	S (optional)		

- *Data under laboratory test conditions.
- Specifications are subject to change without prior notice.

Single-phase On-grid String Inverter

SPI7000~10000-B X2 Series



High Yield

- Multi-MPPT design with max efficiency 98.1%
- Up to 15A max current per PV string



Safe and reliable

- IP66 protection, wide operating temperature, high environment adaptability
- Optional AFCI function, eliminates fire hazards



Easy O&M

- Intelligent WiseSolar APP+ cloud platform provides all-round visual O&M
- Support remote intelligent upgrade service can reduce O&M cost



Household friendly

- Small size, easy to install and use
- Natural cooling, ensuring low environmental noise



Technical Specification

Items	SPI7000-B X2	SPI8000-B X2	SPI9000-B X2	SPI10000-B X2P			
DC Input (PV)							
Max. PV power (recommend)	11.2kWp	12kWp	13.5kWp	15kWp			
Max. PV input voltage	•)Vdc	'			
Rated input voltage		360Vdc					
Max. PV input current		15A/15A		16A/16A/16A			
No. of MPPTs		2		3			
No. of PV strings per MPPT		1/1		1/1/1			
MPPT voltage range		50~550Vdc		50~595Vdc			
Starting voltage		80	Vdc				
DC switch		Υ	es				
AC Output (On-grid)							
Rated AC output power	7.0kW	8.0kW	9.0kW	10.0kW			
Max. output power	7.7kVA	8.8kVA	9.0kVA	10.0kVA			
Rated AC output voltage			/230Vac	1 2.2			
Rated output current	30.4A	34.7A	39.1A	43.5A			
Max. output current	33.5A	38.3A	39.1A	43.5A			
Rated grid frequency		50/6	60Hz				
Grid frequency range		45~55Hz	/55~65Hz				
Power factor		>0.99 (rat	ted power)				
Adjustable power factor			~0.8 (lagging)				
THDI			ed power)				
Efficiency*		,					
Max. efficiency		98	10%				
European efficiency	97.60%						
MPPT efficiency			90%				
Function and protection			<u> </u>				
Anti-islanding			es				
DC (PV) reversed connection			es				
AC short circuit protection			es				
Temperature protection			es				
Surge protection		<u> </u>	e III (Type II optional)				
AFCI function			ptional)				
Integrated PID function			ptional)				
Zero-export function			ptional)				
General		· ·	,				
Dimensions (W*H*D)		435*370)*175mm				
Weight		14kg		14.5kg			
IP grade			266	1			
Self-consumption at night			1W				
Cooling type		Natura	cooling				
Altitude	4000m (>3000m derating)						
Operating temperature		-35°C	~60°C				
Operating humidity			00%				
Display			+APP				
DC terminal		MC4 T	erminal				
AC terminal		Plug and pla	ay connector				
Installation method			nounted				
Communication	RS485	5, DRM (optional), Bluetoo	oth (optional), WIFI /4G (o	ptional)			
Compliance		C 62109-1/2, EN IEC 610					

- *Data under laboratory test conditions.
- Specifications are subject to change without prior notice.

SPI3K~6K-B Series



High Yield

- 2 independent MPPT, more generation
- Advanced control algorithms and high adaptation ability to the grid, improving the stability of power generation system



Safe and reliable

- IP65 for outdoor application
- Integrated DC&AC SPD



Easy O&M

- Intelligent WiseSolar Plus APP+ cloud platform provides all-round visual O&M
- Support Remote online upgrade, convenient and efficient



☐, ☐ Household friendly

- Small size, easy to install and use
- Natural cooling, ensuring low environmental noise



Technical Specification

Items	SPI3K-B	SPI4K-B	SPI5K-B	SPI6K-B	
DC Input (PV)					
Max. PV power (recommend)	3.9kWp	5.2kWp	6.5kWp	7.8kWp	
Max. PV input voltage		· ·	0Vdc	- 1	
Rated input voltage			OVdc		
Max. PV input current			1/13A		
No. of MPPTs		,	2		
No. of PV strings per MPPT			1/1		
MPPT voltage range			950Vdc		
Starting voltage			OVdc		
DC switch		Υ	'es		
AC Output (On-grid)					
Rated AC output power	3kW	4kW	5kW	6kW	
Max. output power	3.3kVA	4.4kVA	5.5kVA	6.6kVA	
Rated AC output voltage	0.0KVA		0/415Vac	0.000	
Rated output current	4.3A	5.8A	7.3A	8.7A	
Max. output current	4.7A	6.4A	8.0A	9.6A	
Rated grid frequency	1.171		z/60Hz	0.071	
Grid frequency range			z/55~65Hz		
Power factor					
Adjustable power factor	>0.99 (rated power) 0.8 (leading)~0.8 (lagging)				
THDi			ed power)		
Efficiency*		1070 (100	ou power)		
Max. efficiency		98	50%		
European efficiency			00%		
MPPT efficiency			90%		
Function and protection			0070		
Anti-islanding			/es		
DC (PV) reversed connection			/es		
AC short circuit protection			/es		
Temperature protection			/es		
Surge protection			pe III (Type II optional)		
AFCI function			optional)		
Zero-export function			optional)		
General		163 (0	, paoliui,		
Dimensions (W*H*D)		/\\$U*\J\\$V	O*180mm		
Weight			.5kg		
			.эк <u>д</u> Р65		
IP grade			1W		
Self-consumption at night					
Cooling type Altitude			I cooling 00m derating)		
			~+60°C		
Operating temperature			~+60°C 100%		
Relative humidity			+LED		
Display DC terminal					
DC terminal			Terminal		
AC terminal Installation method			erminal nounted		
	D.C.			val)	
Communication			FI (optional)/GPRS (option C 61000-6-1/3, IEC 62116		
Compliance	LIN 0∠109-1		0-1, NC RfG	, 120 01/2/,	

- *Data under laboratory test conditions.
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SPI8K~12K-B X2 Series



High Yield

- Multi-MPPT design with max efficiency 98.6%
- Up to 15A max current per PV string



Safe and reliable

- IP66 protection, wide operating temperature, high environment adaptability
- Optional AFCI function, eliminates fire hazards



Easy O&M

- Intelligent Wisesolar Plus APP+Cloud platform support remote upgrade service provides all-round visual O&M
- Compact and light weight for easy O&M



Battery ready (Optional)

- Battery ready for optimizes ROI of users
- Battery power supports the load at night.



Technical Specification

Items	SPI8K-B X2	SPI10K-B X2	SPI12K-B X2				
DC Input (PV)							
Max. PV power (recommend)	10.8kWp	13.5kWp	16.2kWp				
Max. PV input voltage	. cooning	1100Vdc					
Rated input voltage		600Vdc					
Max. PV input current		15A/15A					
No. of MPPTs		2					
No. of PV strings per MPPT		1/1					
MPPT voltage range		180-1000Vdc					
Starting voltage		180Vdc					
DC switch		Yes					
AC Output (On-grid)							
Rated AC output power	8.0kW	10.0kW	12.0kW				
Max. output power	8.8kVA	11.0kVA	13.2kVA				
Rated AC output voltage	0.000	380/400/415Vac	10.2877				
Rated output current	11.6A	14.5A	17.4A				
Max. output current	12.8A	15.9A	19.1A				
Rated grid frequency	12.0A	50Hz/60Hz	13.14				
Grid frequency range		45~55Hz/55~65Hz					
Power factor		>0.99 (rated power)					
Adjustable power factor		0.8 (leading)~0.8 (lagging)					
HDi		<3% (rated power)					
Efficiency*		1370 (rated power)					
		00.00%					
Max. efficiency		98.60%					
European efficiency		98.10%					
MPPT efficiency		99.90%					
Function and protection							
Anti-islanding		Yes					
OC (PV) reversed connection		Yes					
AC short circuit protection		Yes					
Temperature protection		Yes					
Surge protection	DC	C Type II & AC Type III (Type II optio	nal)				
AFCI function		Yes (optional)					
ntegrated PID function		Yes (optional)					
Zero-export function		Yes (optional)					
ESS function		Yes (with meter) (optional)					
General							
Dimensions (W*H*D)		460*420*182mm					
Veight		16kg					
P grade		IP66					
Self-consumption at night		<1W					
Cooling type		Natural cooling					
Altitude		4000m (>3000m derating)					
Operating temperature		-35°C~+60°C					
Relative humidity		0~100%					
Display		LED+APP					
OC terminal		MC4 Terminal					
AC terminal		OT Terminal					
nstallation method		Wall-mounted					
Communication	RS485 (optional), [DRM (optional), WIFI /4G (optional),	Bluetooth (optional)				
Compliance		62109-1/2, EN IEC61000-6-1/3, IE 549-1, NC RfG, VDE-AR-N 4105, C					
*5	1141		·				

- *Data under laboratory test conditions.
- Specifications are subject to change without prior notice.

SPI15K~25K-B X2 Series



High Yield

- Multi-MPPT design with max efficiency 98.6%
- Up to 15A max current per PV string



Safe and reliable

- IP66 protection, wide operating temperature, high environment adaptability
- Optional AFCI function, eliminates fire hazards



Easy O&M

- Intelligent Wisesolar Plus APP+Cloud platform support remote upgrade service provides all-round visual O&M
- Compact and light weight for easy O&M



Battery ready (Optional)

- Battery ready for optimizes ROI of users
- Battery power supports the load at night.



Technical Specification

Items	SPI15K-B X2	SPI17K-B X2	SPI20K-B X2	SPI23K-B X2	SPI25K-B X2				
DC Input (PV)		1	1		I				
Max. PV power (recommend)	20.25kWp	22.95kWp	27kWp	31.05kWp	33.75kWp				
Max. PV input voltage			1100Vdc						
Rated input voltage			600Vdc						
Max. PV input current	30A	30A/15A 30A/30A							
No. of MPPTs		-	2						
No. of PV strings per MPPT	2	/1		2/2					
MPPT voltage range			180~1000Vdc						
Starting voltage			180Vdc						
DC switch			Yes						
AC Output (On-grid)									
Rated AC output power	15kW	17kW	20kW	23kW	25kW				
Max. output power	16.5kVA	18.7kVA	22kVA	25.3kVA	27.5kVA				
Rated AC output voltage			380/400/415Vac						
Rated output current	21.7A	24.5A	28.9A	33.2A	36.1A				
Max. output current	23.8A	27.0A	31.8A	36.5A	39.7A				
Rated grid frequency			50Hz/60Hz						
Grid frequency range			45~55Hz/55~65Hz						
Power factor			>0.99 (rated power)						
Adjustable power factor		0.8	3 (leading)~0.8 (laggi						
THDi			<3% (rated power)						
Efficiency*									
Max. efficiency		98.60%							
European efficiency			98.10%						
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 III (Type	II optional)					
AFCI function			Yes (optional)						
Integrated PID function			Yes (optional)						
Zero-export function			Yes (optional)						
ESS function		Ye	s (with meter) (option	nal)					
General									
Dimensions (W*H*D)			460*420*182mm						
Weight		17kg							
IP grade		IP66							
Self-consumption at night			<1W						
Cooling type		Inte	elligent forced air coc	oling					
Altitude	4000m (>3000m derating)								
Operating temperature		-35°C~60°C							
Relative humidity			0~100%						
Display			LED+APP						
DC terminal			MC4 Terminal						
AC terminal			OT Terminal						
710 101111111	Wall-mounted								
Installation method			Wall-mounted	RS485 (optional), DRM (optional), WIFI /4G (optional), Bluetooth (optional)					
	RS48	5 (optional), DRM (op		tional), Bluetooth (op	otional)				

- *Data under laboratory test conditions.
- Specifications are subject to change without prior notice.

SPI30K~36K-B X2 Series



High Yield

- Multi-MPPT design with max efficiency 98.6%
- Up to 15A max current per PV string



Safe and reliable

- IP66 protection, wide operating temperature, high environment adaptability
- Optional AFCI function, eliminates fire hazards



Easy O&M

- Intelligent Wisesolar Plus APP+Cloud platform support remote upgrade service provides all-round visual O&M
- Compact and light weight for easy



Battery ready (Optional)

- Battery ready for optimizes ROI of
 Users
- Battery power supports the load at night.



Technical Specification

Items	SPI30K-B X2	SPI33K-B X2	SPI36K-B X2
DC Input			
Max. PV input voltage		1100Vdc	
Rated input voltage		600Vdc	
Max. PV input current		30A/30A/30A	
No. of MPPTs		3	
No. of PV strings per MPPT		2/2/2	
MPPT voltage range		180~1000Vdc	
Starting voltage		180Vdc	
DC switch		Yes	
AC Output (On-grid)			
Rated AC output power	30kW	33kW	36kW
Max. output power	33kVA	36.3kVA	39.6kVA
Rated AC output voltage	SSKVA	380/400/415Vac	39.0KVA
	43.2A	47.6A	52.0A
Rated output current Max. output current	43.2A 47.6A	52.4A	57.2A
Rated grid frequency	47.0A	52.4A 50Hz/60Hz	31.2A
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)	
		1370 (rated power)	
Efficiency*			
Max. efficiency		98.60%	
European efficiency		98.20%	
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	D	C Type II & AC Type III (Type II option	onal)
AFCI function		Yes (optional)	
ntegrated PID function		Yes (optional)	
Zero-export function		Yes (optional)	
ESS function		Yes (with meter) (optional)	
General			
Dimensions (W*H*D)		550*480*200mm	
Weight		27kg	
IP grade		IP66	
Self-consumption at night		<1W	
Cooling type		Intelligent forced air cooling	
Altitude		4000m (>3000m derating)	
Operating temperature		-35°C~60°C	
Relative humidity		0~100%	
Display		LED+APP	
DC terminal		MC4 Terminal	
AC terminal		OT Terminal	
Installation method		Wall-mounted	
Communication	RS485 (optional),	DRM (optional), WIFI /4G (optional),	Bluetooth (optional)
Compliance		C 62109-1/2, EN IEC 61000-6-1/3, IE -1, NC RfG, VDE-AR-N 4105, CEI 0-	

- *Data under laboratory test conditions.
- Specifications are subject to change without prior notice.

SPI50K~60K-B Series



High efficiency

- 3 level topology, max efficiency 99%
- 4 MPPT design



Safe and reliable

- Outdoor IP65 design, no derating below 3000m altitude
- All industrial grade electronic device, ensure 25 years full life circle running.



Intelligent management

- Intelligent online upgrade function, easy upgrade and maintain
- Support RS485, Wifi, GPRS communication



☐ Grid friendly

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



Technical Specification

Items	SPI50K-B	SPI60K-B
DC Input (PV)		
Max. PV input voltage	1100	OVdc
Rated input voltage	600	Vdc
Max. PV input current	4×:	30A
No. of MPPTs		4
No. of PV strings per MPPT	3/3	/3/3
MPPT voltage range	300~9	950Vdc
Starting voltage	250	Vdc
DC switch	Y	es
AC Output (On-grid)		
Rated AC output power	50kW	60kW
Max. output power	55kVA	66kVA
Rated AC output voltage	380/400)/415Vac
Rated output current	72.2A	86.6A
Max. output current	79.4A	95.3A
Rated grid frequency	•	/60Hz
Grid frequency range	45~55Hz	/55~65Hz
Power factor	>0.99 (rat	red power)
Adjustable power factor	,	~0.8 (lagging)
THDi		ed power)
Efficiency*	`	. ,
Max. efficiency	98.80%	99.00%
European efficiency	98.30%	98.45%
MPPT efficiency	99.9	90%
Function and protection		
Anti-islanding	Υ	es
DC(PV) reversed connection	Υ	es es
AC short circuit protection	Υ	es
Temperature protection	Υ	es
Surge protection	DC Type II & AC Typ	e III (Type II optional)
General		
Dimensions (W*H*D)	600*860	*294mm
Weight	65	ikg
IP grade	IP	65
Self-consumption at night	<1	IW
Cooling type	Intelligent for	ced air cooling
Altitude	4000m (>300	00m derating)
Operating temperature	-25°C	~60°C
Relative humidity	0~1	00%
Display	LED	+APP
DC terminal	MC4 T	erminal
AC terminal	OT Te	rminal
Installation method	Wall-m	ounted
Communication	RS485, WIFI (option	nal)/GPRS (optional)
Compliance		7/4, IEC 60068, IEC 61727, IEC 62116, IEC 61683, PDE V 0126-1-1, DEWA, IS16221, IS16169, I-1, NC RfG

- *Data under laboratory test conditions.
- Specifications are subject to change without prior notice.

SPI100K~125K-B X2 Series



(A) High Yield

- 9 MPPTs design with max efficiency
- Up to 15A max current per PV string, compatible with large current/ bifacial modules



Safe and reliable

- IP66 and optional C5 anti-corrosion grade, intelligent fan with IP68 protection
- Integrated DC&AC SPD



Easy O&M

- Optional intelligent I-V and fault wave recording, quick failure analysis
- Key components life optimization design Reduce failure risk



System optimization

- Compatible max 240mm2 AL AC
- · Optional PLC communication, save communication cable investment



Technical Specification

Items	SPI100K-B X2	SPI110K-B X2	SPI125K-B X2		
DC Input (PV)					
Max. PV input voltage		1100Vdc			
Rated input voltage		600Vdc			
Max. PV input current		9×30A			
No. of MPPTs		9			
No. of PV strings per MPPT		2			
MPPT voltage range		200~1000Vdc			
Starting voltage		250Vdc			
DC switch		Yes			
AC Output (On-grid)					
Rated AC output power	100kW	110kW	125kW		
Max. output power	110kVA	121kVA	137.5kVA		
Rated AC output voltage		400Vac	I.		
Rated output current	144.3A	158.8A	180.4A		
Max. output current	158.8A	174.7A	198.5A		
Rated grid frequency		50/60Hz	1		
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	98.80%				
European efficiency		98.50%			
MPPT efficiency		99.90%			
Function and protection		33.3070			
-		Vac			
Anti-islanding		Yes			
DC (PV) reversed connection		Yes			
AC short circuit protection		Yes Yes			
Temperature protection Surge protection					
AFCI function		DC Type II & AC Type II			
		Yes (optional)			
Integrated PID function		Yes (optional)			
IV curve scan and diagnosis		Yes (optional)			
General		4000*040*045			
Dimensions (W*H*D)		1030*610*345mm			
Weight		83kg			
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		(optional), WIFI /4G (optional), Blue			
Compliance		/2, EN IEC 61000-6-2/4, EN IEC 61(EC 61727, CEI 0-16,CEI 0-21, EN 50			

- *Data under laboratory test conditions.
- Specifications are subject to change without prior notice.

SPI100K~125K-B Series



High Yield

- 9/6 MPPTs design with max efficiency 98.8%
- Up to 20A max current per PV string, compatible with large current/ bifacial modules



Safe and reliable

- IP66 and optional C5 anti-corrosion grade, intelligent fan with IP68 protection
- Integrated DC&AC SPD



Easy O&M

- Optional intelligent I-V and fault wave recording, quick failure analysis
- Key components life optimization design Reduce failure risk



System optimization

- Compatible max 240mm2 AL AC cables
- Optional PLC communication, save communication cable investment



Technical Specification

Items	SPI100K-B	SPI110K-B	SPI125K-B				
DC Input (PV)	31 1100K-B	Si III ok-B	OI IIZUK-D				
Max. PV input voltage		1100Vdc					
Rated input voltage		600Vdc					
Max. PV input current		9×30A/6×40A					
No. of MPPTs							
		9/6					
No. of PV strings per MPPT		200~1000Vdc					
MPPT voltage range Starting voltage		250Vdc					
DC switch		Yes					
		res					
AC Output (On-grid)	1006/1/	1101/04	4051/1/				
Rated AC output power	100kW	110kW	125kW				
Max. output power	110kVA	121kVA	137.5kVA				
Rated AC output voltage	444.04	400Vac	400.44				
Rated output current	144.3A	158.8A	180.4A				
Max. output current	158.8A	174.7A	198.5A				
Rated grid frequency		50/60Hz					
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		98.80%					
European efficiency		98.50%					
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)					
General							
Dimensions (W*H*D)		1030*610*345mm					
Weight		80kg					
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	RS/185 DI C	(optional), WIFI (optional)/GPRS (optional)	onal) Bluetooth				
Compliance	EN 62109-1/2, IEC 62109- IEC	(optional), WPF (optional)/GPR3 (optional) 1/2, EN IEC 61000-6-2/4, EN IEC 6100 3 60068, IEC 61683, IEC 62116, IEC 6 RfG, EN 50530, UTE C15-712-1, DIN	00-3-11, EN IEC 61000-3-12, 1727,				

- *Data under laboratory test conditions.
- Specifications are subject to change without prior notice.

SPI250K-B-H X2/X2P Series



High Yield

- 12/6 MPPTs design with max efficiency 99.02%, 12 MPPT design, compatible with bifacial PV panel
- Up to 20A max current per PV string, compatible with large current/ bifacial modules



Safe and reliable

- IP66 and optional C5 anti-corrosion grade, intelligent fan with IP68 protection
- Integrated DC&AC SPD



Easy O&M

- Optional intelligent I-V and fault wave recording, quick failure analysis
- Key components life optimization design Reduce failure risk



System optimization

- Optional PLC communication , save communication cable investment
- Optional Q at night function Quick Dynamic response



Technical Specification

	SPI250K-B-H X2	SPI250K-B-H X2P
DC Input (PV)		
Max. PV input voltage	1500Vd	lc
Rated input voltage	1080Vd	
Max. PV input current	12×30A	6×60A
No. of MPPTs	12	6
No. of PV strings per MPPT	2	3
MPPT voltage range	500~1500	
Starting voltage	550Vd	
DC switch	Yes	
AC Output (On-grid)		
Rated AC output power	250kW@30°C, 225kW@4	40°C 200kW@50°C
Max. output power	250kV/	
Rated AC output voltage	800Va	
Rated output current	180.4	
Max. output current	180.4	
Rated grid frequency	50Hz/60	
Grid frequency range	45~55Hz/55	
Power factor	>0.99 (rated	
Adjustable power factor	0.8 (leading)~0.4	
THDi	<3% (rated p	
Efficiency*	,	,
Max. efficiency	99.02%	6
European efficiency	98.80%	6
MPPT efficiency	99.90%	6
Function and protection		
Anti-islanding	Yes	
DC (PV) reversed connection	Yes	
AC short circuit protection	Yes	
Temperature protection	Yes	
Surge protection	DC Type II & A	C Type II
AFCI function	Yes (optio	nal)
Integrated PID function	Yes (optio	nal)
IV curve scan and diagnosis	Yes (optio	
Support night SVG function	Yes (optio	nal)
General		
Dimensions (W*H*D)	1100*760*3	61mm
Weight	117kg	
IP grade	IP66	
Self-consumption at night	<2W	
Cooling type	Intelligent forced	air cooling
Altitude	4000m (>3000n	n derating)
Operating temperature	-35~60°	°C
Cro.amig tomporatare	0~1009	%
Relative humidity		
	LED+AF	PP
Relative humidity	LED+AF MC4 Term	
Relative humidity Display		ninal
Relative humidity Display DC terminal	MC4 Term	ninal inal
Relative humidity Display DC terminal AC terminal	MC4 Term	ninal inal nted

- *Data under laboratory test conditions.
- Specifications are subject to change without prior notice.

SPI250K-B-H



(Name of the High Yield (Name

- 12/6 MPPTs design with max efficiency 99.02%,12 MPPT design, compatible with bifacial PV panel
- Up to 20A max current per PV string, compatible with large current/ bifacial modules



Safe and reliable

- IP66 and optional C5 anti-corrosion grade, intelligent fan with IP68 protection
- Integrated DC&AC SPD



Easy O&M

- Optional intelligent I-V and fault wave recording, quick failure analysis
- Key components life optimization design Reduce failure risk



System optimization

- Optional PLC communication , save communication cable investment
- · Optional Q at night function Quick Dynamic response



Technical Specification

recillical Speci	iication
Items	SPI250K-B-H
DC Input (PV)	
Max. PV input voltage	1500Vdc
Rated input voltage	1080Vdc
Max. PV input current	12×30A
No. of MPPTs	12
No. of PV strings per MPPT	2
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	250kW@30 G, 225kW@40 G, 200kW@30 G
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	1 11 11 11
	>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	99kg
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)/GPRS (optional)
Compliance	EN 62109-1/2, IEC 62109-1/2, EN IEC 61000-6-2/4, IEC 61683, EN 50530, IEC 62116, IEC 61727, IEC 60529, BDEW, CEI 0-16, EN 50549-2, NC RfG

- *Data under laboratory test conditions.
- Specifications are subject to change without prior notice.

SPI300K~350K-B-H/H1 Series



High Yield

- 12/15 MPPTs design with Max efficiency 99.02%
- Up to 20A max current per PV string, compatible with large current/ bifacial modules



Safe and reliable

- IP66 and optional C5 anti-corrosion intelligent fan with IP68 protection
- Integrated DC&AC SPD



Easy O&M

- Optional Intelligent I-V and fault wave recording, quick failure analysis
- .Key components life optimization design, Reduce failure risk



System optimization

- Optional PLC communication, save communication cable investment
- Optional Q at night function ,Quick Dynamic response



Technical Specification

Technical Speci	fication						
Items	SPI300K-B-H	SPI300K-B-H1	SPI320K-B-H	SPI320K-B-H1	SPI350K-B-H	SPI350K-B-H1	
DC Input (PV)							
Max. PV input voltage			150	0Vdc			
Rated input voltage		1080Vdc					
Max. PV input current	12×40A	15×30A	12×40A	15×30A	12×40A	15×30A	
No. of MPPTs	12	15	12	15	12	15	
No. of PV strings per MPPT	. <u>-</u>			2			
MPPT voltage range				500Vdc			
Starting voltage)Vdc			
DC switch				es			
AC Output (On-grid)	I.						
	200	DkW	220)kW	250	DkW	
Rated AC output power							
Max. output power	330)kVA		kVA	355	ikVA	
Rated AC output voltage	240	`	1	Vac	0.50		
Rated output current		6.5A).9A		2.6A	
Max. output current	238	3.2A	_	64A	250	5.2A	
Rated grid frequency				/60Hz			
Grid frequency range				/55~65Hz			
Power factor				ted power)			
Adjustable power factor				~0.8 (lagging)			
THDi			<3% (rate	ed power)			
Efficiency*							
Max. efficiency			99.0	02%			
European efficiency			98.8	80%			
MPPT efficiency			99.9	90%			
Function and protection							
Anti-islanding			Y	es			
DC (PV) reversed connection			Y	es			
AC short circuit protection			Y	es			
Temperature protection			Y	es			
Surge protection			DC Type II	& AC Type II			
AFCI function			Yes (o	ptional)			
Integrated PID function			Yes (o	ptional)			
IV curve scan and diagnosis			Yes (o	ptional)			
Support night SVG function			Yes (o	ptional)			
General							
Dimensions (W*H*D)			1200*80	0*360mm			
Weight			14	0kg			
IP grade			IP	66			
Self-consumption at night			<3	3W			
Cooling type			Intelligent for	ced air cooling			
Altitude		4000m (>3000m derating)					
Operating temperature			-35~	60°C			
Relative humidity			0~1	00%			
Display			LED-	+APP			
DC terminal			MC4 T	erminal			
AC terminal			OT Te	erminal			
Installation method			Wall-m	nounted			
Communication	R	S485, PLC (optio	nal), WIFI (option	al)/4G (optional),	Bluetooth (optior	nal)	
Compliance	EN			C 61000-6-2/4, IE N 4110, VDE-AR-N		727,	

- *Data under laboratory test conditions.
- Specifications are subject to change without prior notice.

Datalogger

E-Manager pro



Secure encryption

Various data transfer encryption of TTPS, TLS, MDS, and WAP2 etc, ensures data safety and user privacy



Strong adaptability

Multichannel of RS-485 communation, which adapt with different devices.



Flexible maintenance

It supports remote upgrading software of data loggers and devices, also remote setting parameters, which effectively reduces cost. support Wi-Fi, Etherent or 4G communication.



Technical Specification

Items	E-Manager pro	
Communication Mode		
Wifi communication	IEEE802.11b/g/n, 2.4GHz, up to 150 Mbps	
4G communication	LTE Cat.1/LTE Cat.4,	
Ethernet communication	10M bps/100M bps	
RS485 communication	RS485*2, 9600 bps 8/N/1 (Default)	
CAN communication(Reserved)	CAN*2, 100/200/250/500/800/1000 Kbps	
I/O interface communication(Reserved)	DO*4 (16A@250Vac /10A@24Vdc), DI*4	
Power Supply		
DC input	5~12Vdc/5~60Vdc, Max current 1.3A	
General		
Max. number of devices	20	
Display	LED*6	
Operating Temperature	-20~60°C	
Relative air humidity	5%~95%RH	
Elevation	4000m	
Protection class	IP20	
Dimensions (W*H*D)	97*81.5*45mm	
Weight	260g	
Mounting type	Top-hat rail mounting	
Compliance	CE	

[•] Specifications are subject to change without prior notice.

Datalogger

Wifi Stick/4G Stick





Smart and flexible

Support WiFi configuration and baud rate configuration Uninterrupted communication distance up to 100m



Simple and efficient

Plug and play, quick installation
Upgrade the data collector and inverter by cloud platform and APP



Safe and reliable

Password and encrypted transmission for data protection IP65 protection, wide operating temperature range

Technical Specification

Items	KC762A	KC761B
Туре	Wifi Stick	4G Stick
Communication Mode		
RS485 communication	Support 4800/9600/115200bps communcation distance ≤100m	
WLAN commnunicatoin	IEEE802.11b/g/n 2.412GHz~2.484GHz	LTE-FDD B1/B3/B5/B7/B8/B20/B28 LTE-TDD B38/B40/B41 GSM 850MHz/900MHz/1800MHz/1900MHz
Power Supply		
DC input voltage	5~15Vdc, 1A@15V	
Power consumption	≤5W	
General		
Max. number of devices	≤10	
Display	LED	
Operating temperature	-30~70°C/-22~158°F	
Relative air humidity	0%~100%	
Elevation	≤4000m/13123.36ft	
Protection class	IP65	
Dimensions (W*H*D)	48*130.5*31.4mm/1.89*5.14*1.24in	
Mounting type	plug & play	
Compliance	CE, FCC	CE

[·] Specifications are subject to change without prior notice.

Smart Communication Box

KM-ACU



Smart and flexible

Support RS485, Ethernet and PLC communication

Support energy meter, weather monitor, sensors and other equipment



Easy O&M

Inverter batch parameter settings and firmware updates

PV-Plant maintenance via remote Web access for optimized OPEX

Active and reactive power control

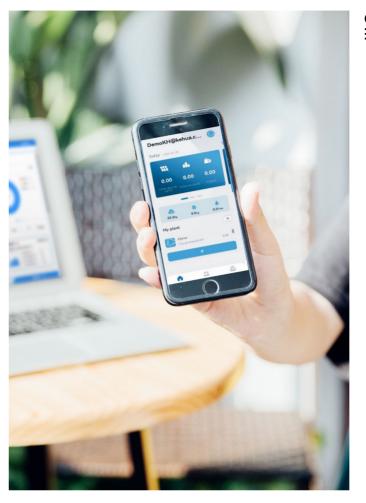


Technical Specification

Items	KM-ACU	
Configuration		
Datalogger	Yes	
RS485	Yes	
DI/DO	Optional	
PLC module	Yes	
Fiber channel switch	2 optical ports, 6 electrical ports	
Splice box	Optional 2-input, 8/12-output	
Anti-PID	Yes	
Ambient Conditions		
Operating temperature range	-30~60°C	
Relative humidity	0%~100%	
Max. operating altitude	4000m	
Power Supply		
Input AC voltage for cabinet	100V~240V, L/N(L)+PE	
Input AC voltage for PLC module	380V-800V, 3 phase	
Input ac frequency	50Hz/60Hz	
Mechanical Parameters		
Cable entries	Bottom in&out	
Dimensions (W*H*D)	950*650*280mm	
Weight	36kg	
IP degree	IP65	
Installation options	Wall mounting, rack mounting, pole mounting	

[•] Specifications are subject to change without prior notice.

APP-WiseSolar Plus





Smart and convenient

Timely push a fault's accurate alarm information to improve O&M efficiency

With remote equipment controlling and configuration taking effect in real time, O&M is convenient and efficient.

Support personalized management functions and real-time income statistics.



Safe and reliable

Provide 24/7 uninterrupted O&M services to ensure equipment safety

With important data backup up to 25 years, information security and traceability are guaranteed

Allow one-key scanning and direct connection to the inverter for safe operation.



Simple operation

On-site direct connection and no registration required, the monitoring configurations can be completed with just a mobile phone

Data is visualized and charts are simple and intuitive Provide automatic positioning and easy station building functions

Function List

Basic Parameters	
Supported language	Chinese/English/Polish/Vietnamese/Brazil/Italy
Supported OS	Android/iOS
Key Functions	
Power station overview	Power station real-time operation state, current generation power, cumulative power
Devices overview	Displays the status of the running devices
History log	Daily, weekly, monthly, total power generation, etc.
Event log	Display all warning, notice, check the power station notice, etc
Power station edit	Can add power station, add device, remove power station and soon.
User management	Personal information, user registration, user login, user exit, etc.
Personalized Functions	
Key parameter settings	Active power, reactive power, anti-PID function, islanding protection function, power factor, grid-connected recovery time, voltage, current protection point, charging current, discharge current setting, etc.
Benefit	Realize the income statistics after setting the local electricity prices
Orientation of map	Support automatic positioning, easy to build station
Weather forecast	Provide local weather information for the last three days

Specifications are subject to change without prior notice.

Kehua Energy Cloud



Smart O&M

Provide multi-level data statistics for required agents , regions , power stations, etc.

Provide systematic online upgrade and remote maintenance functions to ensure stable operation of equipment and power stations.

Support remote IV curve and fault wave recording, efficient data acquisition, and accurate fault locating.



Efficient Management

Provide effective end-user information maintenance and power plant information management.

Provide various types of system logs to locate the cause of a problem accurately

Support batch setting and remote control functions to achieve convenient and efficient management.



Perfect Functions

Provide the functions of account management, event alarm, data report, organization management, equipment assets, and equipment's operation parameter design, etc. Support real-time monitoring of data at the region-level/station-level/equipment-level.

Offer the advantages of comprehensive inverter technology, realize efficient response, and provide a strong support for intelligent O&M management.



Technical Specification

Items	Kehua Energy Cloud	
Parameter		
Language	Chinese/English/Polish/Vietnamese/Brazil/Italy	
Browser	Support IE, Chrome, Firefox	
Data storage interval	>15min (settable)	
Data management	Support 25 years saving	
Function List		
O&M management	Provide management, equipment upgrade and remote control functions, power stations, collectors and inverters	
organization management	Provide the administrator authorizatian, realize the personnel accounts creation and authority management functions	
monitoring center	View real-time information and alerts for monitoring sites and devices, and add agent-level management interface for efficient data monitoring and management	
data report	Provide historical data of power station and equipment, query alarm information, create custom report, download and export functions	
expandability	The system adopts modular design, and supports the modular expansion; Device type and device protocol support configuration expansion.	

[•] Specifications are subject to change without prior notice.



Typical Cases

150MW PV Power Plant in China



2MW PV Power Plant in Poland

115MW PV Power Plant in Europe









PV Power Plant Application

Typical Cases

2MW PV Rooftop Project in Vietnam



1.5MW PV Rooftop Project in Poland



Atlantic County Government Office Rooftop System in New Jersey, USA



2.5MW PV Rooftop Project in Vietnam



PV Power Project for C&I Application

Typical Cases

Poland



Brazil



Australia



Vietnam



Residential PV Power System

Reliable • Flexible • Responsible

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Version NO.: 20230911



