



**Shenzhen JFY Tech.Co.,Ltd.**



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- » Grid-Connected Inverters
- » Off-Grid Hybrid Power
- » PV Accessories



Distribution PV generation station



Utility scale PV power plant

# Company Profile

Green and saving energy, Never interruptible



Founded in 2003, Shenzhen JingFuYuan Tech. Co., Ltd. (Abbr. JFY) is a professional designer, manufacturer and solutions provider in power electronics field. Awarded as National High-tech Enterprise and certified to ISO9001: 2008 international quality system, JFY has 16000 m<sup>2</sup> of production plants and R&D laboratories in Shenzhen headquarter and marketing centers in domestic and overseas areas. Devoting to being a leading supplier with best products and services, JFY offers customers the high cost-effective products and integrated energy solutions with plentiful design and production experiences. The products cover a wide range of Solar Inverter (1.5KW~1MW), UPS, Telecom Power Supply, Off-grid Hybrid solar Power etc. Our products have been sold to more than 50 countries and areas. Their stable operation and excellent performance have been universally recognized by users across the world.

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# JSI Series Single Phase String Inverter



JSI-1100TL~JSI-2500TL

JSI-3000TL, JSI-3600TL

JSI-5000TL, JSI-6000TL

## Features

### High performance string inverters

- From 1.5KW to 6.0KW
- Wide PV input voltage range
- Rapid MPPT tracking technology
- Superior PV energy harvest
- Transformerless design with higher operation efficiency
- Excellent thermal performance
- High overload capability under most ambient conditions

### Full data display and communications

- LCD display energy data
- Bright LED indicators imply system status at a glance
- PC software for remote monitoring and system trouble shooting
- Integrated RS232 serial communications

### Easy and affordable to install

- Lightweight and compact size
- Includes a lightweight portable bracket simplifying installation
- Firm IP65 inverter enclosure allows outdoor application

### Cost advantages

- Transformerless design cutting down the cost
- Light weight and small dimension, reducing shipping cost
- Low maintenance expense

## Certificates

TUV, SAA, CE, CQC, AS4777.2/3, AS/NZS 3100, VDE 0126-1-1, EN62109-1/2, G83, G59, CNCA/CTS0004-2009A, CNCA/CTS0006-2010, EN61000-6-1/2/3/4, EN62109-1/2, RD1663, C10-11

## Technical data

Model (JSI)	1100TL	1500TL	2000TL	2500TL	3000TL	3600TL	5000TL	6000TL
Max. DC Input Power	1170W	1750W	2300W	2700W	3660W	4180W	5300W	6400W
Max. DC Voltage	450Vdc	450Vdc	500Vdc				550Vdc	
MPPT Operating Range	80~450Vdc	100~450Vdc				100~500Vdc		
Number of Parallel Inputs	1			2			3	
Number of MPP Trackers	1							
Max. Input Current	11.7A	10A	13A	14.5A	20A		22.5A	27.5A
Nominal Output Power	1100W	1500W	2000W	2490W/2500W	3000W	3600W	4600W	6000W
Max. Output Power	1100W	1650W	2200W	2490W/2500W	3400W	3600W	5000W	6000W
Nominal Output Current	4.8A	6.5A	8.7A	10.8A	13A	15.7A	20A	26A
Max. Output Current	5.3A	7.9A	10.5A	12A	15.7A	16A	24A	29.3A
Nominal AC Output Voltage	230Vac							
AC Output Voltage Range*	190~265Vac							
AC Grid Frequency Range*	50±5Hz							
Power Factor (cosφ)	>0.99							
THDI	<2%(at nominal output power)	<3% (at nominal output power)						
Max.efficiency	96.40%	96.5%	97.0%	97.1%	97.2%	97.3%	97.4%	97.4%
Euro.efficiency	95.40%	95.5%	96.2%	96.3%	96.4%	96.6%	96.8%	96.8%
MPPT efficiency	99.60%	99.6%	99.6%	99.6%	99.6%	99.6%	99.6%	99.6%
Operating Temperature	-25°C~-+60°C							
Noise (typical)	≤20dB (A)							
Operating Consumption	0W							
Electrical Isolation	Transformerless							
Cooling Concept	Natural Cooling							
Protect Level	IP65							
Communication	RS232 (Wifi optional)							
Dimension (W*D*H mm)	345*152*315		345*152*355		345*152*385		345*152*505	345*162*573
Weight (Kg)	12		13		15		19	24

\*AC grid voltage range and frequency range depend on local standards.

# SUNTWINS Series Dual MPPT String Inverter



## Features

### High performance string inverters

- From 3.0KW to 5.0KW
- Wide PV input voltage range
- Rapid MPPT tracking technology
- Two MPPT trackers
- Superior PV energy harvest
- Transformerless design with higher operation efficiency
- Excellent thermal performance
- High overload capability under most ambient conditions

### Full data display and communications

- LCD display energy data
- Bright LED indicators imply system status at a glance
- PC software for remote monitoring and system troubleshooting
- Integrated RS232 serial communications

### Easy and affordable to install

- Lightweight and compact size
- Includes a lightweight portable bracket simplifying installation
- Firm IP65 inverter enclosure allows outdoor application

### Cost advantages

- Transformerless design cutting down the cost
- Light weight and small dimension, reducing shipping cost
- IP65 protection degree, suitable for outdoor installation, reducing construction cost
- Low maintenance expense

## Certificates

TUV, SAA, CE, CQC, AS4777.2/3, AS/NZS 3100, VDE 0126-1-1, EN62109-1/2, G83, G59, CNCA/CTS0004-2009A, CNCA/CTS0006-2010, EN61000-6-1/2/3/4, EN62109-1/2, RD1663, C10-11

## Technical data

Model (SUNTWINS)	3300TL	4000TL	5000TL
Max. DC Input Power	3300W	4000W	5000W
Max DC Voltage	500Vdc		
MPPT Operating Range	100~450Vdc		
Number of Inputs	2		
Number of MPP Trackers	2		
Max. Input Power per MPPT	2000W	2500W	3000W
Max. Input Current	IN1: 10A/IN2: 10A	IN1: 13A/IN2: 13A	IN1: 15A/IN2: 15A
Nominal Output Power	3000W	3600W	4600W
Max. Output Power	3000W	3600W	4600W
Nominal Output Current	13.0A	15.7A	20.0A
Max. Output Current	14.3A	16.0A	22.0A
Nominal AC Output Voltage	230Vac		
AC Output Voltage Range*	190~265Vac		
AC Grid Frequency Range*	50±5Hz		
Power Factor (cosφ)	>0.99		
THDI	<3% (at nominal output power)		
Max. efficiency	97.4%	97.6%	97.6%
Euro. efficiency	97.0%	97.1%	97.1%
MPPT efficiency	99.6%	99.6%	99.6%
Operating Temperature	-25°C~+60°C		
Noise (typical)	≤25dB (A)		
Operating Consumption	0W		
Electrical Isolation	Transformerless		
Cooling Concept	Natural Cooling		
Protect Level	IP65		
Communication	RS232 (WiFi Optional)		
Dimension (W*D*H mm)	345*152*435		
Weight (Kg)	16.5	18	18

\*AC grid voltage range and frequency range depend on local standards.

# SUNTREE Series Three Phase String Inverter



## Features

### High performance string inverters

- From 5.0KW to 30.0KW
- Famous power components
- Superior PV energy harvest
- Excellent thermal performance
- Transformerless design with higher operation efficiency
- High overload capability under most ambient conditions

### Full data display and communications

- LCD display energy data
- Bright LED indicators imply system status at a glance
- PC software for remote monitoring and system troubleshooting
- Integrated RS485/RS232 serial communications

### Easy and affordable to install

- Lightweight and compact size
- Wide MPPT voltage range allows more flexible module selections
- Includes a lightweight portable bracket simplifying installation
- Firm IP65 inverter enclosure allows outdoor application

### Cost advantages

- Transformerless design cutting down the cost
- Light weight and small dimension, reducing shipping cost
- Low maintenance expense and low power loss when breakdown

## Certificates

TUV, SAA, CE, CQC, AS4777.2/3, AS/NZS 3100, VDE 0126-1-1, EN62109-1/2, G83, G59, CNCA/CTS0004-2009A, CNCA/CTS0006-2010, EN61000-6-1/2/3/4, EN62109-1/2, RD1663, C10-11

## Technical data

Model (SUNTREE)	5000TL	6000TL	8000TL	10000TL	12000TL	15000TL	17000TL	20000TL	30000TL
Max Power of PV Array	5180W	6200W	8300W	11200W	13300W	15800W	17900W	21100W	32000W
Max DC Voltage	900Vdc			1000Vdc					
MPPT Operating Range	250~800Vdc								400~800Vdc
Number of Inputs	2			4		6			10
Number of MPPT Trackers	2								
Max. Input Power per MPPT	3500W	4000W	5000W	6000W	7000W	8500W	9500W	11000W	16500W
Max Input Current	20A	24A	32A	44A	48A	60A	64A	70A	82A
Rated Power	5000W	6000W	8000W	10000W	12000W	15000W	17000W	20000W	30000W
Max Output Power	5000W	6000W	8000W	10000W	12000W	15000W	17000W	20000W	30000W
Rated Output Current	7.3A	8.7A	11.6A	14.5A	17.4A	21.7A	24.6A	29.0A	43.5A
Max. Output Current	7.9A	9.5A	12.7A	16.0A	19.4A	24.3A	27.5A	32.3A	48A
Nominal Output Voltage	400Vac								
Output Voltage Range*	330~480Vac								
Grid Frequency Range*	50/60±5Hz								
Power Factor	0.9 (lead)~0.9 (lag)								
THDI	<3% (at nominal output power)								
Max.efficiency	97.6%	97.8%	98.1%	98.2%	98.2%	98.2%	98.2%	98.2%	>98.2%
Euro.efficiency	96.7%	96.9%	97.3%	97.6%	97.6%	97.6%	97.6%	97.6%	>97.8%
MPPT efficiency	99.6%	99.6%	99.6%	99.6%	99.6%	99.6%	99.6%	99.6%	>99.9%
Operation Temperature	-25°C~-+60°C								
Noise	≤25dB (A)			≤50dB (A)					≤65dB (A)
Loss	0W								
Isolation	Transformerless								
Cooling	Natural cooling			Fan cooling					
Protect Level	IP65								
Communication	RS485/RS232 (WiFi optional)								
Dimension (W*D*H mm)	470*165*560			470*165*585		470*165*685			580*235*800
Weight (Kg)	32			35		50			60

\*AC grid voltage range and frequency range depend on local standards.



# SUNFOREST Series Central Commercial Inverter



## Features

### Advanced performance

- With the advanced system intelligence, highly speed MPPT technology, industrial-grade engineering and complete fault protections, Sunforest series central commercial inverters maximize system uptime and power production, even in harshest environments
- DSP-controlled IGBT circuitry to achieve high efficiency, reliability and low installing cost
- Sunforest KT series grid-tied inverters are integrated with an isolation transformer
- Sunforest KTL series grid-tied inverters have a max efficiency of 98.6% without a transformer
- Multiple work mode, SVG (Static Var Generator) mode, Anti-Reverse Power control mode

### Optimal MPPT technology

- Rapid and accurate control boost PV plant KWH yield
- Provides a wide range of operation voltage

### Utility-ready features

- Open communication protocol, compatible with any third-party monitoring system and easily integrated into SCADA systems
- Remote control of real and reactive power
- LVRT (Low voltage ride through)
- Power factor control
- Simplified grid interconnection

### Increased PV plant yield

- Rapid and accurate MPPT control increases PV plant KWH yield by extending the production window of arrays, enabling them to operate at optimal voltage and current levels for longer periods of time-even in varied sunlight conditions to maximize efficiency and enable you to get the most from your investment

### Safety

- Built-in DC and AC disconnected switches

## Certificates

CQC, CNCA/CTS0004-2009A, CNCA/CTS0006-2010

## Technical data

Model (SUNFOREST)	50KT	75KT	100KT
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### Input (DC Side)

Max. DC input Power	58KW	87KW	115KW
Max DC voltage	1000Vdc		
MPPT operating range	450~820Vdc (start voltage 470Vac)		
Number of parallel inputs	2		
Number of MPP trackers	1		
Max. input current	128A	200A	250A

### Output (AC Side)

Nominal output power	50KW	75KW	100KW
Max. output power	55KW	82.5KW	110KW
Nominal output current	72A	108A	144A
Max. output current	80A	120A	158A
Nominal AC output voltage	400Vac		
AC output voltage range*	360~440Vac		
AC grid frequency range*	50±5Hz		
Power factor (cosφ)	0.9 (leading)~0.9 (lagging)		
THDI	<3% (at nominal output power)		

### Efficiency

Max efficiency	96.5%	96.8%	97.1%
Euro efficiency	95.8%	96.2%	96.4%
MPPT efficiency	99.9%	99.9%	99.9%

### System

Operating temperature	-25°C~+60°C (derated power above 50°C)		
Altitude	6000m (derated power above 3000m)		
Noise (typical)	≤65dB (A)		
Consumption at night	<100W		
Electrical isolation	Transformer		
Cooling concept	Fan cooling		
Degree of protection	IP20		
Communication	RS485		
Dimension (W*D*H mm)	600*650*1450	650*700*1550	800*700*1700
Weight (kg)	520	650	810

\*AC grid voltage range and frequency range depend on local standards.

# SUNFOREST Series Central Commercial Inverter

## Technical data

Model (SUNFOREST)	150KT	175KT	250KTL	250KT
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### Input (DC Side)

Max. DC input Power	172KW	202KW	285KW	285KW
Max DC voltage	1000Vdc			
MPPT operating range	450~820Vdc (start voltage 470Vac)			
Number of parallel inputs	4	4	5	5
Number of MPP trackers	1			
Max. input current	380A	500A	600A	600A

### Output (AC Side)

Nominal output power	150KW	175KW	250KW	250KW
Max. output power	165KW	192KW	275KW	275KW
Nominal output current	217A	254A	535A	362A
Max. output current	238A	280A	589A	400A
Nominal AC output voltage	400Vac	400Vac	270Vac	400Vac
AC output voltage range*	360~440Vac	360~440Vac	243~297Vac	360~440Vac
AC grid frequency range*	50±5Hz			
Power factor (cosφ)	0.9 (leading)~0.9 (lagging)			
THDI	<3% (at nominal output power)			

### Efficiency

Max efficiency	97.2%	97.2%	98.4%	97.3%
Euro efficiency	96.5%	96.6%	98.0%	96.8%
MPPT efficiency	99.9%	99.9%	99.9%	99.9%

### System

Operating temperature	-25°C~+60°C (derated power above 50°C)			
Altitude	6000m (derated power above 3000m)			
Noise (typical)	≤65dB (A)			
Consumption at night	<100W			
Electrical isolation	Transformer	Transformer	Transformerless	Transformer
Cooling concept	Fan cooling			
Degree of protection	IP20			
Communication	RS485			
Dimension (W*D*H mm)	900*900*1800	900*900*1800	1000*900*1850	1985*900*1850
Weight (kg)	830	1150	890	1750

\*AC grid voltage range and frequency range depend on local standards.

## Technical data

Model (SUNFOREST)	500KTL	500KT	630KTL	630KT
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### Input (DC Side)

Max. DC input Power	570KW	570KW	715KW	715KW
Max DC voltage	1000Vdc			
MPPT operating range	450~820Vdc (start voltage 470Vac)		500~820Vdc (start voltage 520Vac)	
Number of parallel inputs	12			
Number of MPP trackers	1			
Max. input current	1200A	1200A	1400A	1400A

### Output (AC Side)

Nominal output power	500KW	500KW	630KW	630KW
Max. output power	550KW	550KW	693KW	693KW
Nominal output current	1070A	725A	1155A	910A
Max. output current	1177A	800A	1270A	1000A
Nominal AC output voltage	270Vac	400Vac	315Vac	400Vac
AC output voltage range*	243~297Vac	360~440Vac	283~347Vac	360~440Vac
AC grid frequency range*	50±5Hz			
Power factor (cosφ)	0.9 (leading)~0.9 (lagging)			
THDI	<3% (at nominal output power)			

### Efficiency

Max efficiency	98.5%	97.3%	98.6%	97.5%
Euro efficiency	98.0%	96.6%	98.2%	97.0%
MPPT efficiency	99.9%	99.9%	99.9%	99.9%

### System

Operating temperature	-25°C~+60°C (derated power above 50°C)			
Altitude	6000m (derated power above 3000m)			
Noise (typical)	≤65dB (A)			
Consumption at night	<100W			
Electrical isolation	Transformerless	Transformer	Transformerless	Transformer
Cooling concept	Fan cooling			
Degree of protection	IP20			
Communication	RS485			
Dimension (W*D*H mm)	1700*900*1850	3100*900*1850	1700*900*1850	3100*900*1850
Weight (kg)	1427	3200	1677	3400

\*AC grid voltage range and frequency range depend on local standards.

# One-Stop PV Power Plant



## Features

- Built-in two 500/630KW high efficient inverter with perfect power distribution, firefighting protection, monitoring system to meet requirements to rapidly and security connect the grid
- IP54 containerized design, easy to transport and install
- DC power distribution and cooling integrated design, reducing cost of whole system
- Comply the zero-voltage ride trough standard
- SVG running mode controlling reactive power compensation at night
- Transformerless design, the highest efficiency 98.6% (European efficiency 98.2%)
- Active and reactive power adjustable according to the grid command
- Strong capability to the harsh grid environment, LCL filter, low output harmonic
- Perfect protection to ensure reliable operation of the system
- Auxiliary heating optional, normal running at ambient temperature of minus 35 degrees

SP-1000/1260KTL with the four integrated functions as DC distribution, inverting-inversion and system monitoring, this solution of inverter cells is able to control from the DC output of PV modules to the grid-connection in one-stop, and has significant advantages at system integration, environmental adaptation, overall investment, speedy installation and debugging, etc. The integrated design of power distribution and inverting-inversion is based on the high performance inverter and distribution cabinet, and the total solution will reduce the system loss and bring higher equipment compatibility, hence improve the power generating efficiency and the system stability. The field installation of this product is more convenient and quick since it's adapted to integral hoisting with shorter duration of construction, lower cost, smaller construction difficulty and risks. This overall solution of inverter cells is standardized and able to be debugged and grid-connected rapidly.

## Technical data

Model	SP 1000KTL	SP 1260KTL
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### DC Side

Max. DC input power	1157KW	1410KW
Max DC voltage	1000Vdc	1000Vdc
MPPT operating range	450~820Vdc (start voltage 470Vac)	500~820Vdc (start voltage 520Vac)
Number of parallel inputs	24	24
Number of MPP trackers	2	2
Max. input current	2400A	2800A

### AC Side

Nominal output power	1000KW	1260KW
Max. output power	1100KW	1400KW
Nominal output current	2140A	2310A
Max. output current	2354A	2566A
Nominal AC output voltage	270Vac	315Vac
AC output voltage range*	243~297Vac	283~347Vac
AC grid frequency range*	50±5 Hz	50±5 Hz
Power factor (cosφ)	0.9 (leading)~0.9 (lagging)	0.9 (leading)~0.9 (lagging)
THDI	<3% (normal output power)	<3% (normal output power)

### Efficiency

Max efficiency	98.5%	98.6%
Euro efficiency	98.0%	98.2%
MPPT efficiency	99.9%	99.9%

### System

Operating temperature	-35°C~+55°C	-35°C~+55°C
Noise (typical)	≤65dB (A)	≤65dB (A)
Consumption at night	<200W	<200W
Electrical isolation	Transformerless	Transformerless
Cooling concept	Fan cooling	Fan cooling
Degree of protection	IP54	IP54
Communication	RS485	RS485
Dimension (W×D×H)(mm)	5700*2438*2896	5700*2438*2896
Weight (kg)	7200	7700

\* Note: AC grid voltage range and frequency range depend on local standards

# XPR Series Home Inverter



## Features

### High reliability

- Built-in AC charger and inverter
- Fully automatic restart operation
- Overvoltage / undervoltage / over-temperature / short circuit / overload / battery poles anti-reverse protection
- Mains and inverter switch quickly
- Allowed to cut off DC when the power is on, automatically switch to bypass and does not affect the supply to the load for convenient battery maintenance and replacement

### Applications

- TV, stereo, notebook computer and other appliances
- Cars, electric cars, trains, yachts, ships
- The power outage place: homes, offices, stores
- Field operations, tourism
- Night commercial activities Location: night market, shops, stalls, farms, etc

### High efficiency, minimize charging loss

- Advanced technology to optimize battery life
- The battery voltage is too high or too low, the inverter shutdown output and automatic recovery if the battery voltage is back to normal

### Load compatibility

- Inverter shutdown output due to overload, after eliminating the overload, inverter will automatically restore the output power
- Support power on without DC, you can run only the mains input. This feature allows first put into inverter to use and then install the battery

### Cheap, cost-effective and flexible select

- DC 12V/24V, AC 220/230/240V output
- User-friendly design, easy to install and operate
- Different outlet options

XPR series home inverter built-in high efficiency inverter and large power charger to delivery stable power output in a compact size. When utility power is available, it charges the batteries; when utility power is outage, inverter works at battery mode, the battery delivery power for the load. XPR series home inverter modified inverter series convert DC power to correct sine wave power output, simple circuit design, and high reliable performance.

XPR1200/2400 with high efficiency to convert DC power into AC power and reliable power output for the following applications provide continuous and stable power output by 720 watts / 1440 watts.

## Technical data

Model (XPR)	1200VA	2400VA
Rated power	1200VA/720W	2400VA/1440W

### DC Input

Battery	12Vdc	24Vdc
Constant charger voltage	14.3Vdc	28.6Vdc
Floating charge voltage	13.7Vdc	27.4Vdc
Low-battery alarm voltage	10.2Vdc	20.4Vdc
Overcharge protection	15.0Vdc	30.0Vdc
Shutdown voltage	9.9Vdc	19.8Vdc
Charging current	max 20A	
Backup time	the backup time is up to battery capacity	

### AC Input

Phase	L+N
Input voltage	(90~290)Vac
Input frequency	50/60Hz (Auto detection)

### AC Output

Output voltage	220/230/240VAC $\pm$ 10% (adjustable)
Output frequency	50/60Hz (Auto Sensing)
Output power factor	0.6
Overload capability	line mode: 110%<load<130%, 5min; >130%, shut down; battery mode: 110%<load<120%, 15s; >120%, shut down;
Transfer time	20ms typical
Output waveform	Modified sine wave

### System

Efficiency	AC to DC: >95%; DC to DC: >82%	
Noise (1m front)	<55dBA	
Operation temperature	0°C~+40°C	
Humidity	0~90% non-condensing	
Storage temperature	-15°C~+50°C	
Altitude	1000m	
Dimension (W*D*H mm)	231.5*293*82.5	
Weight (kg)	2.22	2.37



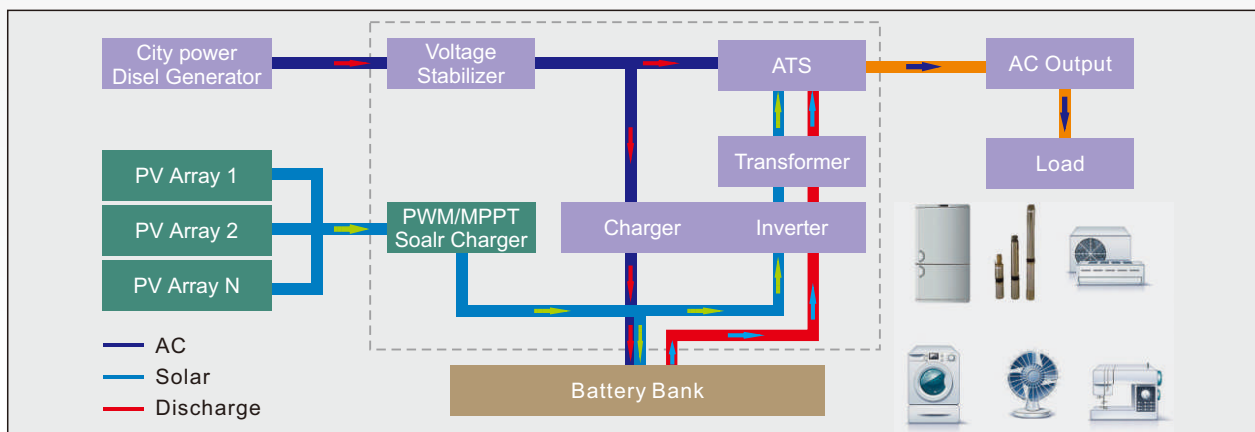
# Indoor Solar Charger & Inverter



## Features

- Integrated with solar charger, AC charger (optional), inverter, AC bypass switch, transformer, solar and DC battery terminals, protection breakers and LCD display
- Auto-switch smoothly transfer the load to city power or inverter's output
- MPP tracking technology, offer wide input voltage, low input current, stable charging voltage and current, reduce the investment of solar panels, can save 20~30% panels compared with the PWM solar charger
- Auxiliary-charging could complement power to battery by city power even if PV array does not work in the raining days
- Low frequency transformer allows to withstand high inrush load current, supports fan, pump, refrigerator, TV, air-conditioner, lamp etc
- True sine wave output
- Preferential solar charging function uses the renewable energy while city power is complementary
- The input of city power can be substituted by the input of diesel generator

## System Graph



## Technical data

Model Meaning:  
XPI 0.5KVA -D M L  
 ① ② ③ ④ ⑤

① Indoor solar inverter&charger series  
 ② Capacity  
 ③ D/U: support diesel generator/city power  
 ④ M: MPPT controller; P: PWM controller  
 ⑤ S: internal battery; L: external battery

Model (XPI)	0.5KVA	0.7KVA	1.0KVA	1.5KVA	2.0KVA	3.0KVA	4.0KVA	5.0KVA	6.0KVA	7.0KVA
	XPI _ _KVA-DMS/DML/ DPS/DPL/UMS/UML/UPS/UPL									
Inverter rating power	350W	500W	700W	1000W	1.5KW	2.0KW	3.0KW	3.5KW	4.2KW	5.0KW
Rated battery voltage	24Vdc			48Vdc			96Vdc			
Battery configuration	Inside max 200AH*2pcs/External			Inside max 200AH*4pcs/Ext.			External (12Vdc*8pcs)			

### Solar charger parameters

Charger type	PWM/MPPT		MPPT		MPPT	
Max. PV input power	900/1440W		2880W		5760W	
PV input voltage	30~50Vdc/30~90Vdc		70~150Vdc		150~300Vdc	
Max. solar charging current	30A/50A		50A		50A	
Battery float charge voltage	27.2Vdc		54.5Vdc		109Vdc	
Battery equalization charge voltage	28.8Vdc		57.6Vdc		115.2Vdc	

### AC Charger Parameters (optional)

City power input voltage range	175~270Vac (50Hz)/90~135Vac (60Hz)	
City power input frequency voltage	50/60Hz±3%	
AC charging current	Standard: 10A, Max.: 15A	

### Inverter Parameters

Inverter output voltage	220/110Vac±3% (optional 120/127/230Vac)	
Inverter output frequency	50/60Hz±1%	
Efficiency	>80%	>85%
Overload capability	Overload Protection: 105~120% 30s; 120~150% 10s; >150% 5s; short circuit, 0.1ms	
Crest factor	3 (can endure any startup of inductive load)	
Output wave	true sine wave	

### Others Parameters

Display	LCD+LED	
Display content	PV status, battery capacity, AC input voltage, AC output voltage, load	
Comprehensive protections	AC&DC overload, under-voltage, SPD, short-circuit, overcharge, overdischarge, over-temperature	
Cooling	High-velocity cooling fan	
Communication	RS232	
Noise	<60dB	
Operation temperature	0°C~40°C	
Storage temperature	-15°C~+50°C	
Humidity	0~90%, no dew	
Altitude	0~3000m (above 1000m, derated power 1% per 100m)	
Dimension (W*D*H mm)Bat In/Out	365*575*980/488*212*310	615*575*980/603*325*470
Weight (kg)Bat In/Out	148/8	149/9
	150/10	281/11
	289/19	291/22
	35	40
	45	54

## Technical data

Inverter communication	RS485
Remote communication	WiFi (802.11 b/g)/Ethernet
Max. communication range	<1km
Communication rate	9600bps
WiFi communication range	300m in outdoor open area without obstruction
WiFi frequency	2.4GHz
Data collection intervals	5minutes
Firmware updates	Serial/Wireless
Data access	Serial/WiFi point-to-point/remote server
Status display	4LEDs

### Electrical

Input voltage	DC5V
Static power consumption	<1.6W
Max. power consumption	<2.5W

### Environmental

Operating temperature	-10°C~+65°C
Operating humidity	10%~90% relative humidity, no condensation
Storage temperature	-40°C~+85°C
Storage humidity	<40%
Protection class	IP21

### Physical

Installation method	Wall mounted or flatwise
Certificates	FCC\CE\RoHS
Dimension (W*D*H mm)	110*80*26
Weight (g)	108



## Solar WiFi/Ethernet Data Logger

Using wireless communication function, WiFi transfers information from the inverter to the remote server by router. Then customers obtain the information from the server by clients, such as PC, mobile phone, PAD and so on.

## Features

- A variety of communication methods available, including Ethernet, WiFi
- Can be connected to up to 12 inverters
- Quick installation and easy operation with "Plug & Play" function
- Easy access data via Internet anywhere and anytime, no additional software required
- Graphical display of PV system data on data logger

## Solar EM Environmental Monitor

Compact, easy to install. Acquisition a variety of environmental parameters, modular design, and the user can select the appropriate demand function to achieve cost optimization. RS485 communication and selection criteria MODBUS communications connect networking.



## Technical data

Model	WiFi Plug
<b>Communication</b>	
Inverter communication	RS232
Remote communication	WiFi (802.11 b/g/n)
Max upporting number of inverter	1pcs
Communication rate	9600bps
WiFi communication range	100m in outdoor open area without obstruction
Data collection intervals	5min (default)/1~15min (Optional)
Firmware updates	Wireless
Data access	WiFi point-to-point/remote server
Preferences setting	Web server
Power source	Powered by RS232 port on inverter

### Environmental

Operating temperature	-25°C~+60°C
Storage temperature	-40°C~+80°C
Protection class	IP65

### General

Certificates	FCC/CE/C-tick
Dimension (W*D*H mm)	80*85*22

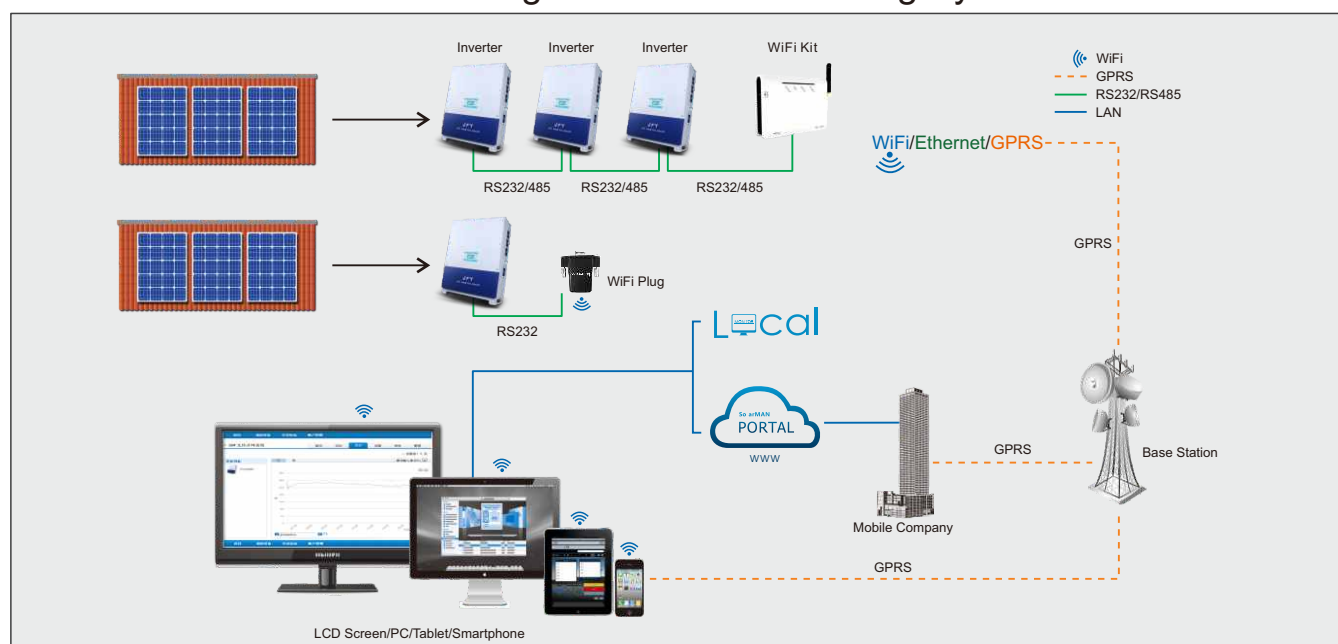


The new generation of WiFi Plug enables operation under AP and STA mode simultaneously, which means that users can directly get access to the internal Web Server via WiFi, and at the same time the module can connect to remote portal via WiFi, enabling users to monitor PV systems anytime and anywhere via Internet.

## Features

- Connect with inverters on its RS232 port, no additional external hardware
- WiFi (802.11 b/g/n) communication according to user requirements
- Remote monitoring via SolarMAN Portal
- Able to upgrade software of inverter via WiFi
- Optimized configuration interface makes setting procedures easier and faster

## JFY WiFi Plug & WiFi Kit Monitoring System



# PV Combiner Box

## Features

- Remote monitor, RS485 communication (optional)
- Simplest installation of cables
- Comply with the requirement of outdoor installation
- Wide DC input voltage, maximum input voltage 1000VDC
- Special DC fuse for PV system
- Special SPD for PV system
- Easy to maintain
- Customized on demand (dimension, strings, DC fuse etc)
- PV Combiner Box (PVCB-8M/10M/12M/16M)

For large scale PV generation system, combiner box can reduce the cables between PV modules and inverters, increase reliability of system and make maintenance easier. PVCB series combine box is designed with high performance and reliability, provides total system solutions with our grid-tied inverters. It ensures safety of PV system and reduces the installation time.



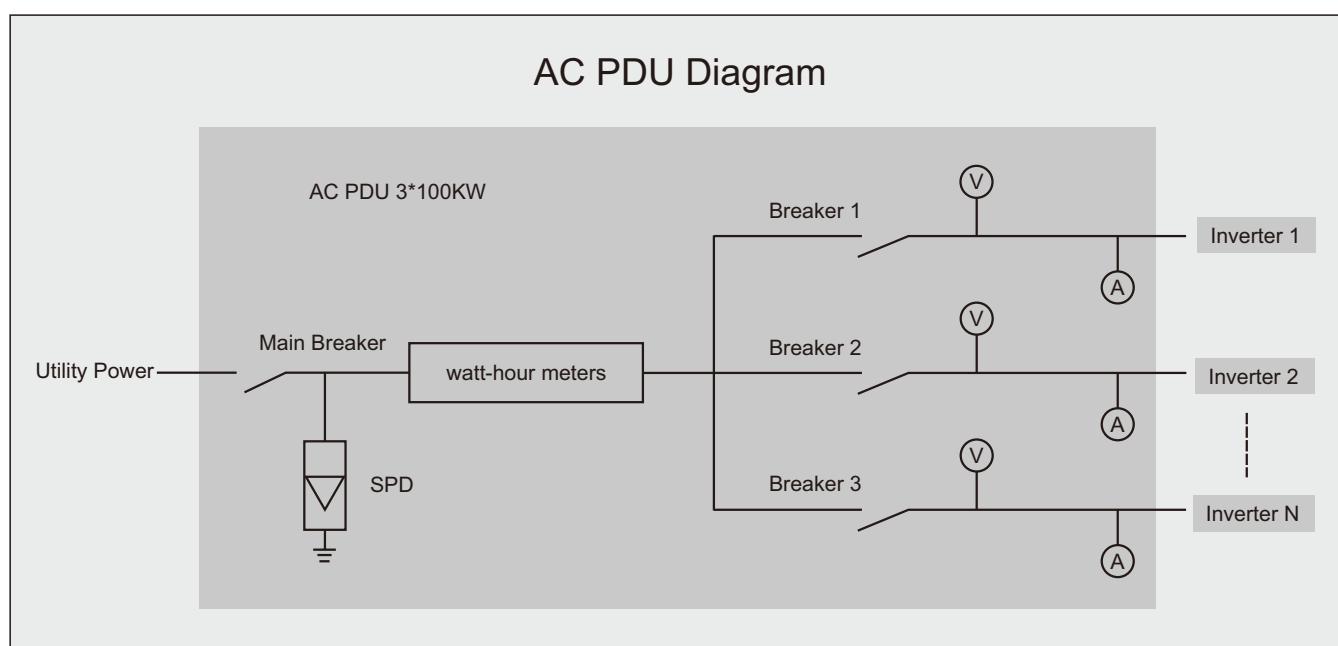
## Technical data

Model	PVCB-8M	PVCB-10M	PVCB-12M	PVCB-16M
Max DC input voltage	1000Vdc			
Number of input string	8	10	12	16
Current per DC fuse of string	10/15A			
Output terminal	PG21			
Protection level	IP65			
Environment temperature	-25°C~60°C			
Environment humidity	0~99%			
Output DC breaker	yes			
Lighting module	yes			
String current inspection	yes			
SPD failure inspection	yes			
Output DC breaker inspection	yes			
PV input reverse-polarity protection	RS485			
Communication	Diode (Optional)			
Dimension (W*H*D mm)	400*200*420	460*200*470	460*200*470	460*200*590
Weight (kg)	15	15	18	20

# AC Power Distribution Unit

## Features

- Power: 50KW~1260KW
- Simplify the wiring of solar system
- Easy to maintain and operate
- Increase reliability and safety of system
- Customized on demand (dimension, internal configuration)



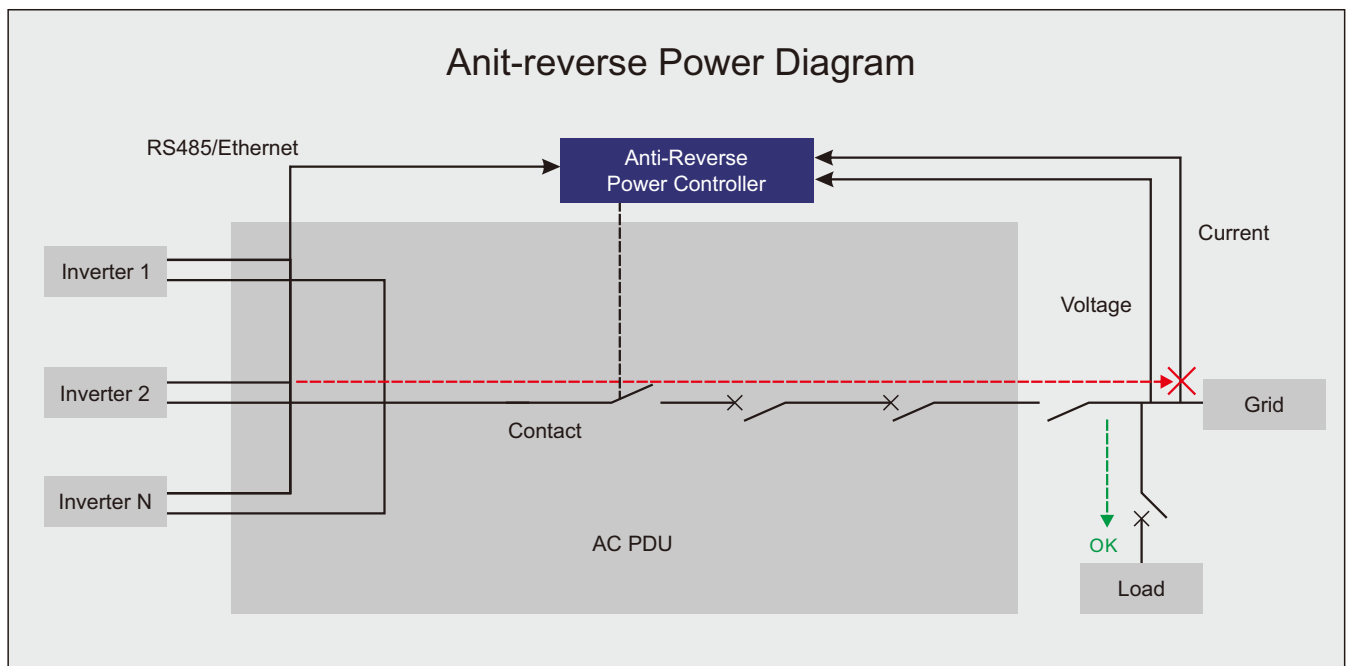
## Technical data

Model	JFY-ACB300K	JFY-ACB500K	JFY-ACB1000K
Max. number of connecting inverter	3pcs*100KW	2pcs*250KW	2pcs*500KW
Nominal AC output power	300KW	500KW	1000KW
Max. AC output current	476A	1200A	1800A
Wiring	Copper bars		
SPD	Superior SPD		
Isolation	3000Vac, 1min		
Protection Level	IP20		
Dimension (W*D*H mm)	900*600*1800	1100*600*1800	1300*600*1800
Weight (kg)	155	190	250

# Anti-reverse Power Controller

## Features

Anti-Reverse Power Controller make sure that the solar energy supply the local load instead of the public utility by monitoring the voltage and current of the utility interface. When solar energy flows to the utility, it will reduce the output current of inverters; if the communication has problems or other system failures happen; it will totally stop the connection between the inverters and the utility power grid by disconnecting the breaker of AC PDU or turning off the inverter by preset program.



## Technical data

Power	50KW~500KW
Number of connect inverter	Maximum 31pcs
Auxi-power	AC 220V 50Hz
No load power	<50W
Communication	RS485 (Ethernet optional)
Display	LCD
Cooling	Air cooling
Operation temperature	-25°C~+55°C
Protection level	IP 20
Precision	0.5S (0.5 CT)
Dimension (W*H*D mm)	239*215*42
Weight (kg)	3.5

# Solardog Wireless Monitor

## Features

- Integrated large LCD display
- Bar chart display for historical output energy of PV system, for example, daily, monthly and yearly output energy
- Advanced wireless communication technology (Up to 120 meters in open area)
- Monitor up to 5 inverters, convenient to monitor small commercial or residential PV system
- Real time monitoring for output power of PV system, operation value and carbon saving data
- Error recorder and warning buzzer
- Integrated with Earth Faulty Alarm

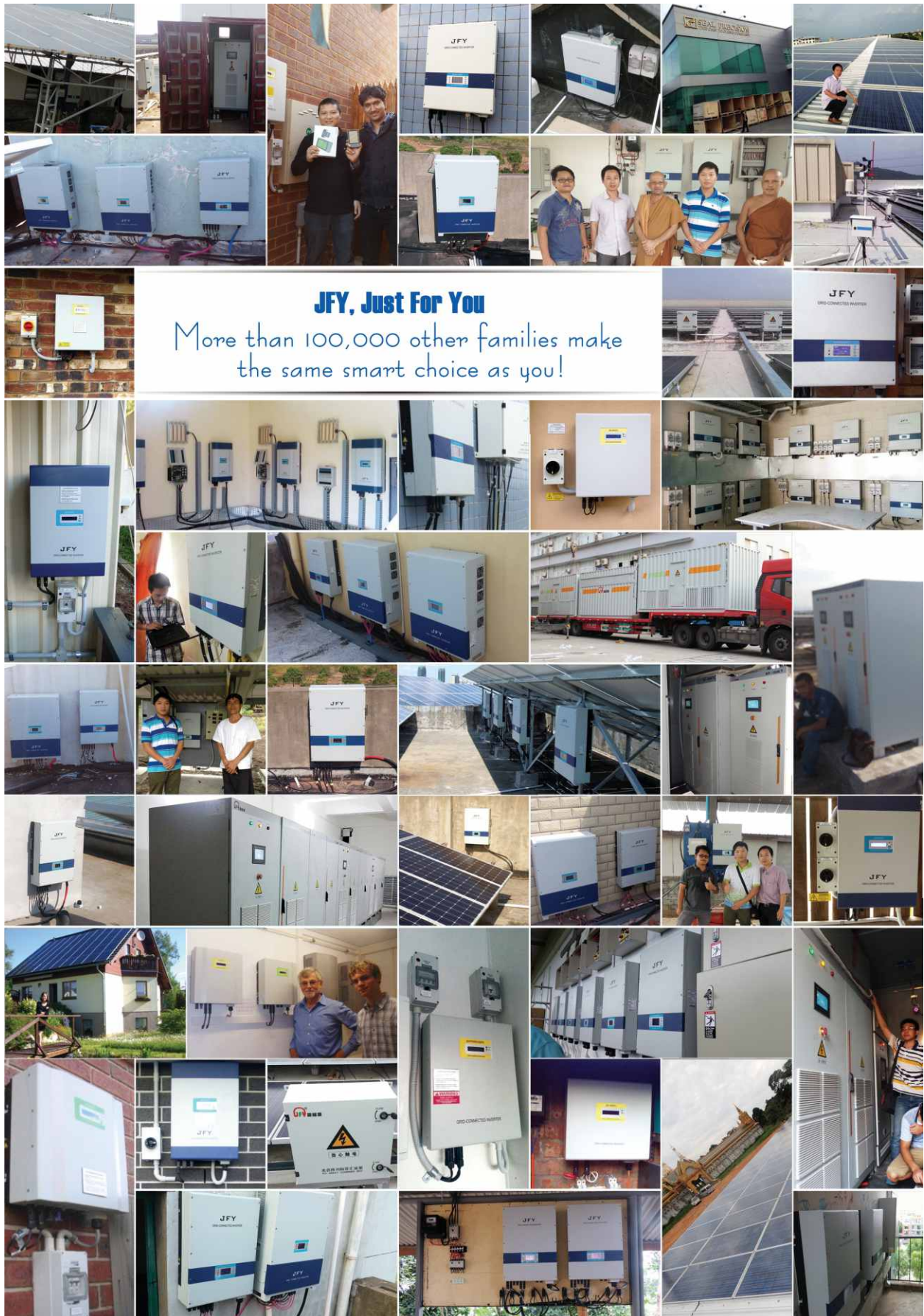


## Technical data

	Receiver Unit	Emitter Unit
Power source	AA*3	Powered by RS232 port on inverter
Working current	<30mA	<120mA
Wireless transmission mode	433MHZ FSK	433MHZ FSK
Communication distance	120m	120m
LCD display	90*76MM digital display	\
Installing type	\	Plug on RS232 port on inverter, each EU per inverter
Monitor the max. number of inverter	5	\
Max. number of connected emitter unit	5	\
Currency	£, \$, ¥	\
Real-time power display	Yes	\
E-total display	Yes	\
E-history date display	Yes	\
Date display	D/M/Y	\
Time display	Yes	\
Error alarm	Yes/LCD display& warning buzzer	\
Stand-by current	<1mA	\
IP protection type	IP20 (Indoor type)	IP65 (Outdoor type)
Operation temperature range	0°C~50°C	-25°C~60°C
Warranty	2 years	2 years



# References



## Export to more than 50 Countries



### **30MW PV generation station in Inner Mongolia, China**

Total system capacity 30MW utilizing a total of 29 sets of 1 MW inverter units.

Each megawatt inverter unit contains two sets SUNFORST-500KT concentrated photovoltaic grid-connected inverters and housings with related intelligent ventilation systems, fire protection, lighting and power distribution systems.

The project is expected to generate 30 thousand kWh per hour in peak sunlight conditions. The project generates in excess of 31 million kWh average annual, saves more than 12,000 tons of standard coal and reduces carbon dioxide emissions of nearly 45,000 tons.

The Datang company is a large enterprise group directly managed by the state.

This project cooperation with Datang demonstrates JFY's product performance, quality, capability and commitment to research and development.

### **30MW demonstration PV generation station in Luoyang, China**

30MW total installed capacity requiring a total investment of 330 million yuan. The project is installed on the roof of 25 manufacturing buildings with a total area of over 350,000 square meters.

The project includes 26 PV power stations and is expected to be generating 30 thousand kWh per hour in peak sun conditions. The project generates more than 31 million kWh average annual and saves more than 12,000 tons of standard coal, reducing carbon dioxide emissions of nearly 45,000 tons.

### **15,000 units off-grid power in northwest area of China**

In the remote northwest area there is an electricity shortage which presents a major inconvenience to the residents. 500VA off-grid power by JFY utilizes built in solar controllers and inverters to provide easy to use household sized units for each family to bring stable power to meet their lighting, heating and other basic household appliance needs.

### **First Home distribution PV system in Qingdao, China**

### **5.2MW PV generation system in Jiangxi, China**

### **5MW PV generation system in Shandong, China**

### **6.5MW PV generation system in Hefei, China**

### **2.5MW PV generation station in Guangzhou, China**

### **1.63MW PV generation station in Shandong, China**

### **2.58MW PV grid-connected system in Beijing, China**

### **Demonstration PV system in Jiangxi, China**

### **Demonstration PV system on roof in Jiangxi, China**

### **Distribution PV system in Hohhot, China**

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# Certificates



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