

SOLAR PHOTOVOLTAIC INVERTER

Top PV Inverter Manufacturers



Single Phase(1~3.6kW)



Single Phase(3~8kW)



Three-phase(5~15kW)



Three-phase(17~40kW)



Three-phase(50~60kW)

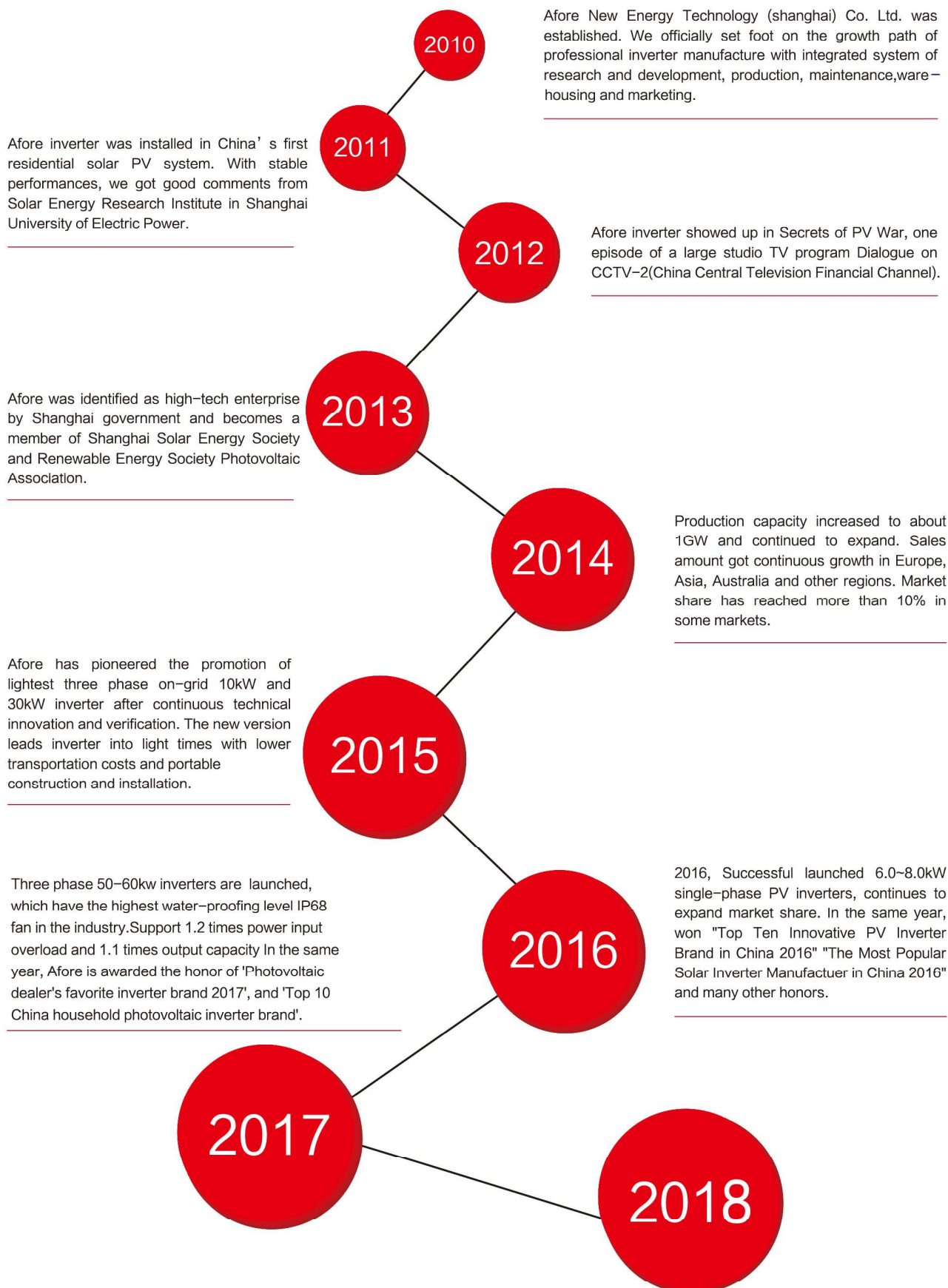


Residential PV Storage

10 Year Dedicated Inverter Manufacturing

Afore 艾伏

Our Footprints



Product Applications

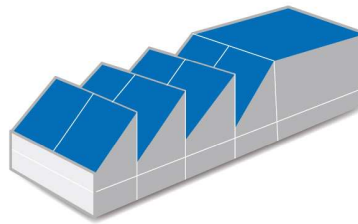
Residential System



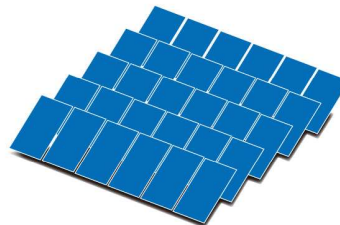
Afore Anyhome offers effective solutions for customers' roofs according to size, structure, and orientations etc.

Small Commercial System

Afore adopts modular design concept in small three-phase applications. This improves the generation efficiency and system stability effectively and reduces costs of installation and maintenance in the meantime.



Commercial System and Power Plants



In large power plants or megawatt applications, Afore provides lighter weight inverters and smart modular design concept, with which the PV system owns greater flexibility and stability guarantee.

Responsibility and Mission

Afore is making her own contributions to protect our earth together with customers.

The following numbers are growing rapidly!



Graphic

kWh



CO₂



SO₂

NOX

H₂O

Environmental Benefit Analysis

Expected Annual Generation (MWh)

Standard Coal (t)

CO₂(tce)

TSP(t)

SO₂(t)

NOX(t)

H₂O (m3)

Energy Saving and Emission Reduction (Yearly)

652212

234796.32

650255.364

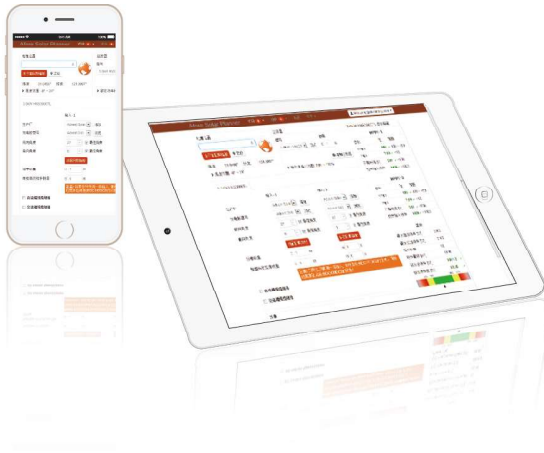
177401.664

19566.36

9783.18

2608848

Services



- **Afore Solar Planner:** On-line PV system design tool helps you complete plant design quickly in simple operation.



Good Services: Efficient pre-sale and after-sale services, comprehensive technical supports and product training for our partners



Global Logistics: Cooperated with global logistics partners, Ensure timely and safely delivery



Quick React: 24/7 timely feedback



On-line Support: Online question answering and FAQ



Head Quarter Service Land Line: 400-133-9885



Mail: service@aforeenergy.com

Residential 1-8kW

External Inductor

Temperature inside of the box is effectively reduced by isolating the main heat source, which significantly improves the reliability and lifetime of inverter.

Aluminum Enclosure Design

Light and compact with premium whole body cooling. Surface treated by anodic oxidation, which enhances high strength, effective anti-oxidation and corrosion resistance from acid and alkali.

Touch Button

High reliability and more responsive.

Wired Ethernet/WI-FI(Optional)

Enable customers to get to know inverter operation status easily.





Residential 1-8kW



Two MPPT design (HNS3000TL~HNS8000TL)



Quick and easy installation



MPPT efficiency > 99.9%



Multiple automatic intelligent protections



No fans design. Noise is lower than 40dB under full-load operation



Compact and light body design. Reduce costs of logistics and installation

Electrical Specifications		HNS1000TL-1	HNS1500TL-1	HNS2000TL-1	HNS2500TL-1	HNS3000TL-1	HNS3500TL-1	HNS4000TL	HNS5000TL	HNS600CTL	HNS7000TL	HNS8000TL
Input (DC)		1100	1650	2200	2750	3300	3710	3300	3960	4400	5500	6500
Max DC Power (W)		450	450	530	500	500	550	550	550	550	550	580
Max DC Voltage (V)		360	360	350	360	360	380	360	360	350	380	450
Rated/Recommended Voltage (V)		50~400	90~400	120~400	120~400	120~400	120~450	120~450	120~450	120~450	120~450	120~480
MPPT DC Voltage Range (V)		60	60	150	150	150	150	150	150	150	150	150
Start up DC Voltage (V)		10	10	12	14	17	17	12*2	15*2	16*2	18*2	18*2
Max DC Current (A)		1	1	1	1	1	1	2	2	2	2	2
Number of MPPT Tracker		1	1	1	1	1	1	2	2	2	2	2
Number of DC connections (set)		1	1	1	1	1	1	2	2	2	2	2+1
Output (AC)												
Max AC Power (W)		1050	1550	2100	2600	3100	3700	3100	3700	4100	5100	6100
Nominal AC Power (W)		1000	1500	2000	2500	3000	3600	3000	3600	4000	5000	6000
Max AC Current (A)		6	9	12	13	15	18	15	16	20	23	28
Nominal AC Current (A)		6	8	10	12	13	16	13	16	18	22	26
Nominal AC Voltage (V)				220/230							220/230	
Nominal AC Frequency (Hz)				50/60							50/60	
Power Factor				-0.95~+0.95							-0.95~+0.95	
Output current THD				<3%							<3%	
Power consumption												
Power consumption at Night (W)		<0.2	<0.2	<1	<1	<1	<1	<1	<1	<1	<1	<1
Power consumption at Standby (W)				6							6	
Power Efficiency												
Max Efficiency		96.50%	96.50%	97.70%	97.70%	97.70%	97.70%	98.03%	98.03%	98.03%	98.10%	98.20%
Euro Efficiency		96.00%	96.00%	96.50%	96.90%	97.00%	97.00%	97.60%	97.60%	97.60%	97.60%	97.80%
MPPT Efficiency		>99.9%	>99.9%	>99.9%	>99.9%	>99.9%	>99.9%	>99.9%	>99.9%	>99.9%	>99.9%	>99.9%
Safety and protection												
Safety Standard		EN/IEC 62109-1/-2										
EMC Standard		EN/IEC 61000-6, EN/IEC 61000-3										
Anti-islanding Protection		Internal										
General information												
Dimensions (H x W x D) [mm]		320*345*170		360*345*170		460*345*170		560*345*170				
Enclosure		IP65		IP65		IP65		IP65				
RCD		Internal		Internal		Internal		Internal				
Weight (kg)		9		12		17		18.5				
Ambient Temperature Range		-25℃ ~ +60℃		-25℃ ~ +60℃		-25℃ ~ +60℃		-25℃ ~ +60℃				
Relative humidity		0% ~ 100%		0% ~ 100%		0% ~ 100%		0% ~ 100%				
Topology		Transformerless		Transformerless		Transformerless		Transformerless				
Communication Interface		RS485(WI-FI)Wire Ethernet/GPRS (optional)		RS485(WI-FI)Wire Ethernet/GPRS (optional)		RS485(WI-FI)Wire Ethernet/GPRS (optional)		RS485(WI-FI)Wire Ethernet/GPRS (optional)				
Cooling Concept		Convection		Convection		Convection		Convection				
Noise Emission [dB]		<28		<28		<40		<40				
Maximum Altitude(above sea level) (m)		Up to 2000m without derating		Up to 2000m without derating		Up to 2000m without derating		Up to 2000m without derating				



VDE
0126
4105

GB3/2
G59/3



NEW

Small Commercial 5–10kW

External Inductor

Temperature inside of the box is effectively reduced by isolating the main heat source, which significantly improves the reliability and lifetime of inverter.

Aluminum Enclosure Design

Light and compact with premium whole body cooling. Surface treated by anodic oxidation, which enhances high strength, effective antioxidation and corrosion resistance from acid and alkali.

Touch Button

High reliability and more responsive.

Wired Ethernet/WI-FI(Optional)

Enable customers to get to know inverter operation status easily.



Two MPPT design



Quick and easy installation



MPPT efficiency > 99.9%



Multiple automatic intelligent protections



High-quality power output and low THDI. Generally THDI is lower than 3% and near 1% when power output is more than 50%



No fans design. Noise is lower than 40dB under full-load operation.



Active and reactive power compensation, adjust power factor, reduce losses and improve efficiency



Compact and light body design. The weight of this series is lightest in industry and costs of logistics and installation are greatly reduced.

10kW Only
Weights
21.5kG

Electrical Specifications	BNT005KTL	BNT006KTL	BNT008KTL	BNT010KTL
Input (DC)				
Max DC Power (W)	5500	6600	8800	11000
Max DC Voltage (V)	1000	1000	1000	1000
Rated /Recommended Voltage (V)	620	620	620	620
MPPT DC Voltage Range (V)	200–800	200–800	250–800	300–800
Start up DC Voltage (V)	250	250	320	320
Max DC Current (A)	11*2	11*2	11*2	11*2
Number of MPPT Tracker	2	2	2	2
Number of DC Connections (set)	2	2	2	2
Output (AC)				
Max AC Power (W)	5350	6450	8600	10000
Nominal AC Power (W)	5000	6000	8000	10000
Max AC Current (A)	8.5	10.5	13.5	17
Nominal AC Current (A)	7	8.5	11	14
Nominal AC Voltage (V)	3P+N+PE/3P+PE,230/400			
Nominal AC Frequency (Hz)	50/60			
Power Factor	-0.95 ~ +0.95			
Output current THD	<3%			
Power consumption				
Power consumption at Night (W)	<1			
Power consumption at Standby (W)	10			
Power Efficiency				
Max Efficiency	98.10%	98.10%	98.20%	98.20%
Euro Efficiency	97.55%	97.60%	97.65%	97.70%
MPPT Efficiency	99.90%	99.90%	99.90%	99.90%
Safety and protection				
Safety Standard	EN/IEC 62109-1/-2			
EMC Standard	EN/IEC 61000-6, EN61000-3			
Anti-islanding Protection	Internal			
General information				
Dimensions(WxHxD) (mm)	680*345*170			
Enclosure	IP65			
RCD	Internal			
Weight (kg)	21.5			
Ambient Temperature Range	-25℃ ~ +60℃			
Relative humidity	0% ~ 100%			
Topology	Transformerless			
Communication Interface	Wired Ethernet/WI-FI(Optional)			
Cooling Concept	Convection			
Noise Emission [dB]	<40			
Maximum Altitude(above sea level) (m)	Up to 2000m without derating			



NEW

Commercial & Power Plants 15–40 kW

External Inductor

Temperature inside of the box is effectively reduced by isolating the main heat source, which significantly improves the reliability and lifetime of inverter.

Aluminum Enclosure Design

Light and compact with premium whole body cooling. Surface treated by anodic oxidation, which enhances high strength, effective anti-oxidation and corrosion resistance from acid and alkali.

Touch Button

High reliability and more responsive.

Wired Ethernet/WI-FI(Optional)

Enable customers to get to know inverter operation status easily.



30kW Only
Weights
42kG

Afore



MPPT efficiency > 99.9%



Internal LCL choke reduces impacts on the inverter and the system from frequent switching of power supply



Intelligent Temperature Control System



Active and reactive power compensation, adjust power factor, reduce losses and improve efficiency



Multiple automatic intelligent protections

Electrical Specifications	BNT015KTL	BNT017KTL	BNT020KTL	BNT025KTL	BNT030KTL	BNT036KTL	BNT040KTL
Input (DC)							
Max DC Power (W)	16500	18700	22000	27500	33000	40000	44000
Max DC Voltage (V)	1000	1000	1000	1000	1000	1000	1000
Rated /Recommended Voltage (V)	620	620	620	620	620	620	620
MPPT DC Voltage Range (V)	300~800	300~800	300~800	300~800	300~800	300~850	300~850
Start up DC Voltage (V)	320	320	320	320	320	320	320
Max DC Current (A)	19*2	21*2	22*2	30*2	33*2	36*2	40*2
Number of MPPT Tracker	2	2	2	2	2	2	2
Number of DC Connections (set)	4	4	4	6	6	8	8
Output (AC)							
Max AC Power (W)	16100	18250	21450	25160	30200	36500	40500
Nominal AC Power (W)	15000	17000	20000	25000	30000	36000	40000
Max AC Current (A)	27	30	32	40	45	56	61
Nominal AC Current (A)	22	25	29	36	43	54	58
Nominal AC Voltage (V)	3P+N+PE/3P+PE,230/400						
Nominal AC Frequency (Hz)	50/60						
Power Factor	0.99 (−0.8~+0.8)						
Output current THD	<3%						
Power consumption							
Power consumption at Night (W)	<1						
Power consumption at Standby (W)	<15						
Power Efficiency							
Max Efficiency	98.50%	98.50%	98.50%	98.50%	98.50%	98.65%	98.65%
Euro Efficiency	98.00%	98.10%	98.10%	98.10%	98.10%	98.20%	98.25%
MPPT Efficiency	99.90%	99.90%	99.90%	99.90%	99.90%	99.90%	99.90%
Safety and protection							
Safety Standard	EN/IEC 62109–1/–2						
EMC Standard	EN/IEC 61000–6, EN61000–3						
Anti-islanding Protection	Internal						
General information							
Dimensions(WxHxD) (mm)	730*465*222					750*465*222	
Enclosure	IP65						
RCD	Internal						
Weight (kg)	40			42		46	
Ambient Temperature Range	–25℃ ~ +60℃						
Relative humidity	0% ~ 100%						
Topology	Transformerless						
Communication Interface	Wired Ethernet/WI–FI/GPRS(Optional)						
Cooling Concept	Intelligent fan cooling						
Noise Emission [dB]	< 40			< 51			
Maximum Altitude(above sea level) (m)	Up to 3000m without derating						



NEW

Commercial & Power Plants 50–60 kW

External Inductor

Temperature inside of the box is effectively reduced by isolating the main heat source, which significantly improves the reliability and lifetime of inverter.

Aluminum Enclosure Design

Light and compact with premium whole body cooling. Surface treated by anodic oxidation, which enhances high strength, effective anti-oxidation and corrosion resistance from acid and alkali.

Touch Button

High reliability and more responsive.

Wired Ethernet/WI-FI(Optional)

Enable customers to get to know inverter operation status easily.



MPPT efficiency > 99.9%



Intelligent Temperature Control System



Active and reactive power compensation, adjust power factor, reduce losses and improve efficiency



Multiple automatic intelligent protections



Industry top IP68 grade fan



DC and AC lightning protection function(Type II)



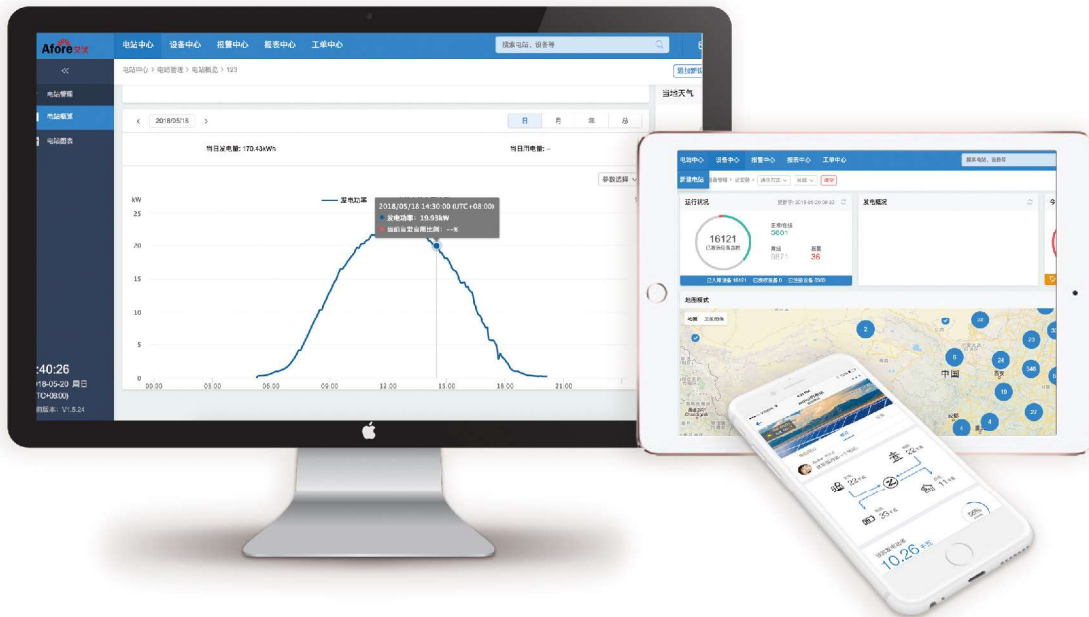
support 1.2 times power input overload and 1.1 times output capacity

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Electrical Specifications	BNT050KTL	BNT060KTL
Input (DC)		
Max DC Power (W)	60000	72000
Max DC Voltage (V)	1000	1000
Rated /Recommended Voltage (V)	620	620
MPPT DC Voltage Range (V)	300 ~ 950	300 ~ 950
Start up DC Voltage (V)	320	320
Max DC Current (A)	36/36/36	40 /40 /40
Number of MPPT Tracker	3	3
Number of DC Connections (set)	12	12
Output (AC)		
Max AC Power (W)	55000	66000
Nominal AC Power (W)	50000	60000
Max AC Current (A)	80	95
Nominal AC Current (A)	72.5	87
Nominal AC Voltage (V)	3P+N+PE/3P+PE,230/400	
Nominal AC Frequency (Hz)	50/60	
Power Factor	0.99 (−0.8~+0.8)	
Output current THD	<3%	
Power consumption		
Power consumption at Night (W)	<1	
Power consumption at Standby (W)	<15	
Power Efficiency		
Max Efficiency	98.80%	99%
Euro Efficiency	98.45%	98.50%
MPPT Efficiency	99.90%	99.90%
Safety and protection		
Safety Standard	EN/IEC 62109–1/–2	
EMC Standard	EN/IEC 61000–6, EN61000–3	
Anti–islanding Protection	Internal	
General information		
Dimensions(WxHxD) (mm)	630*850*306	
Enclosure	IP65	
RCD	Internal	
Weight (kg)	66	68
Ambient Temperature Range	–25℃ ~ +60℃	
Relative humidity	0% ~ 100%	
Topology	Transformerless	
Communication Interface	Wired Ethernet/WI–FI/GPRS(Optional)	
Cooling Concept	Intelligent fan cooling	
Noise Emission [dB]	< 55	
Maximum Altitude(above sea level) (m)	Up to 3000m without derating	



■ Monitoring



Cloud data synchronization: Data upload fast and timely



PC browser, Andriod and IOS: Friendly interface enables users to monitor the system anytime and anywhere



Real-time/ Historical data monitoring and analysis: Rich graphs display output power, electricity generation and income subsidies etc



Failure alarm: Help users know the abnormal operating situation of system conveniently and timely



PV sytem information push: Full acknowledge of the operation status by mail push without logging in the monitoring account



Multiple systems in one account: Offer unified managements, save time and efforts of users



Log-in Interface: Simple and friendly, full-featured, reliable and stable, convenient and easy to operate.



Real-time Display: Basic operating parameters are provided to users for knowing the operation status quickly.



History Record: Intuitive and clear in graph form. Easy to analyze data and find out the failure causes by selecting different data items and different time ranges.



Report Analysis: Real time data is uploaded in very five minutes, and could be generated into detailed data report. Convenient for system analysis and optimization.

Installation Projects



Dongtai, China 50kW



Dorchester, UK 2.0kW



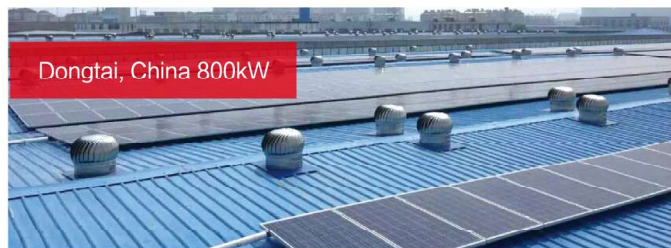
Fukuoka, Japan 55kW



Zhejiang, China 55kW



Perth, Australia 15kW



Dongtai, China 800kW



Perth, Australia 15kW



Perth, Australia 10kW



Jiangsu, China 1.5MW



Dongtai, China 100kW



Jiading, China 80kW

Fukuoka, Japan 55kW



Cambridge, UK 4.0kW



Hiroshima, Japan 42kW



Perth, Australia 15kW



Shanghai, China 150kW



Jiangsu, China 1.5MW

