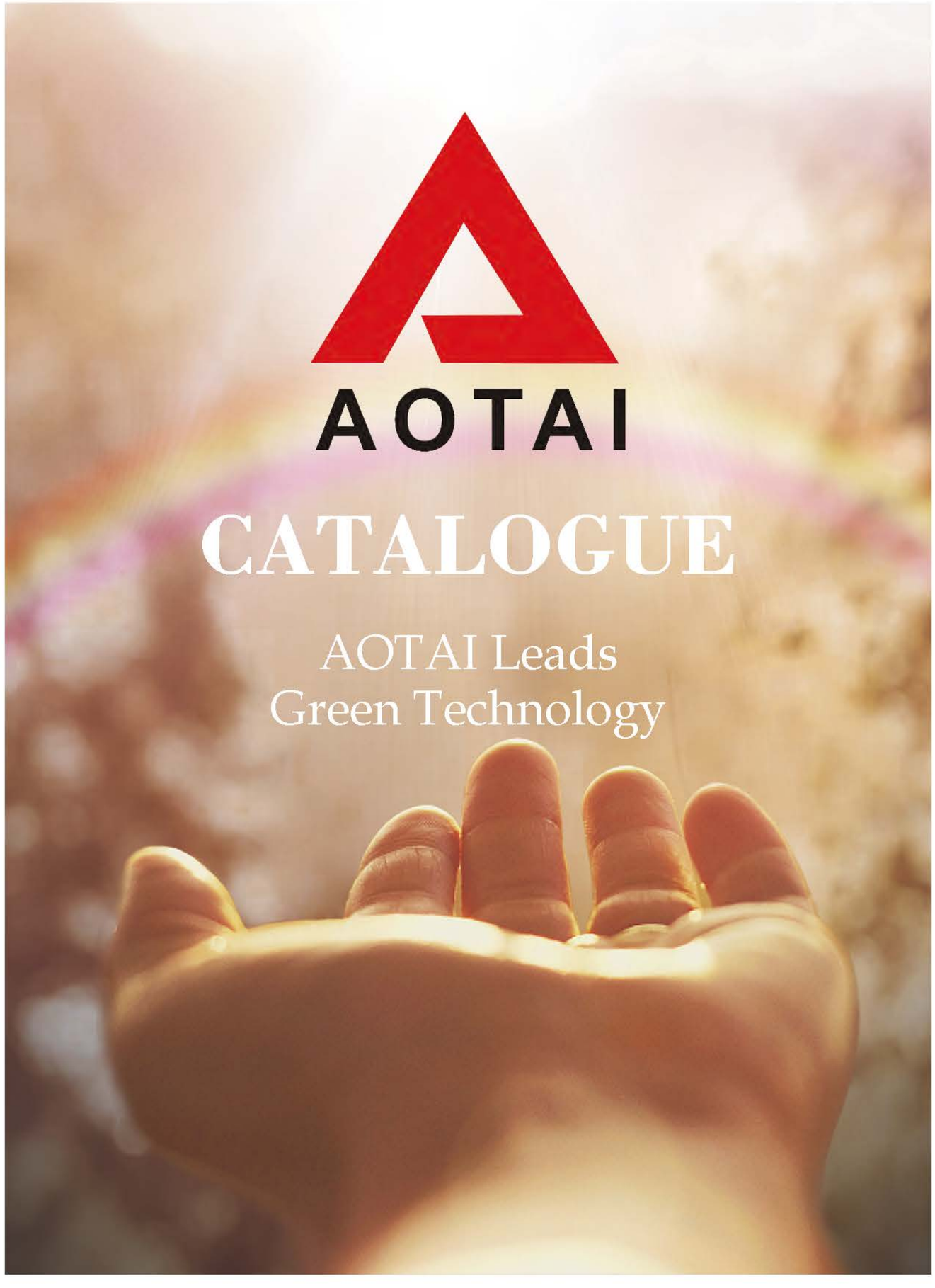
Aotai Electric Co.,LTD

Address: 282 Bole Ave High-tech Development Zone,
Jinan, Shangdong 250101, P.R.China
Tel: +86-531-81921036 Fax: +86-531-88876665
Email: service@aotaiwelding.com
www.aotaielectric.com



AOTAI

ABOUT US

Established in 1993, AOTAI Electric is a leading manufacturer of inverter machines, including both solar inverters and inverter welding machines. As a typical technology-oriented company, its main products reflect development level of cutting-edge technology in this field in China.

With strong R&D team, AOTAI has National R&D testing laboratory, and has achieved over 300 patents. Its solar inverter won National Science and Technology Progress Award in 2016.

Based in China market, AOTAI has partners and branches in over 128 countries. Its grid-tied solar inverters have been widely used at residential, C&I rooftop projects, and large ground-based projects. Strict quality control, 24/7 service guarantee, flexible support policy greatly ensure benefits of our global partners.

国家科学技术进步奖

证　书

为表彰国家科学技术进步奖获得者，
特颁发此证书。

项目名称：高性能光伏发电系统关键控制
技术与产业化应用

奖励等级：二等

获 奖 者：山东奥太电气有限公司

中华人民共和国国务院

2016 年 12 月 21 日

证书号：2016-J-220-2-02-D02

National Science and Technology Progress Award

First solar inverter manufacturer won this award.

Company History

2022
Total installation over 20GW

2020
O&M projects over 8GW

2018
Top 100 High-tech Innovative Enterprises in Shandong

2016
"Front runner" certification

National Science and Technology Progress Award for solar, first solar inverter manufacturer won this award.

2015
Education Ministry Award, Shandong Science Progress Award

2011
"National Local Joint Engineering Laboratory" set up

2009
Solar division set up

2004
National Science and Technology Progress Award for welding

2001
“National Torch Program High-tech Enterprise”

1993
Establishment

1988
Origin from Shandong University Automation Research Institute

AOTAI

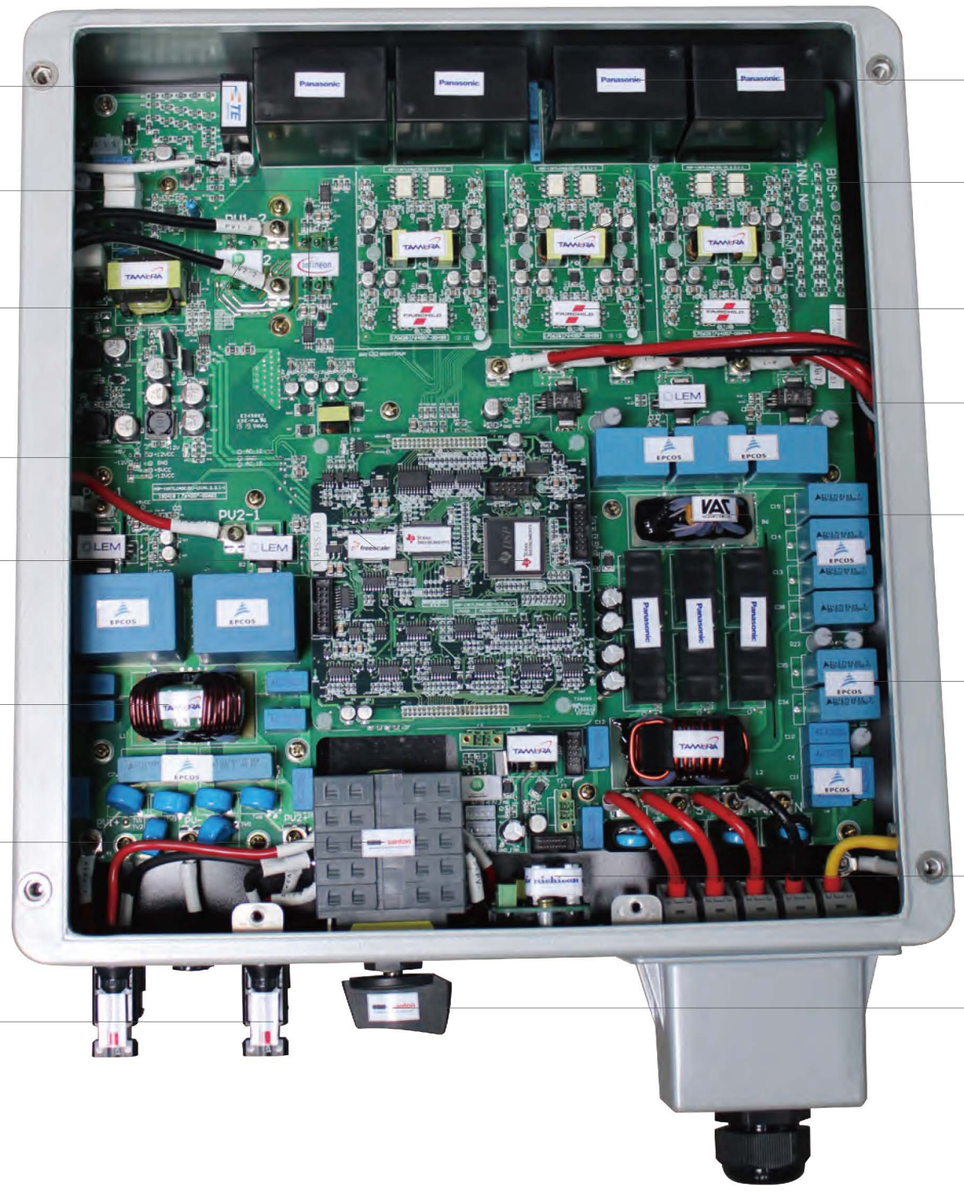
Production Process /Quality Control

AOTAI boasts with whole production lines, from the most original SMT circuit board production to the final high temperature aging test. Its full series of automatic production equipment and refined management of whole process inspection make it achieve international leading technical level.

1000+ tests

AOTAI

Safe And Reliable



TE connectivity
Infineon technologies
ON 安森美半导体 ON Semiconductor
freescale™
Texas Instruments
TAMURA
santon superior switch solutions
Multi-Contact MC STÄUBLI GROUP

Panasonic
TAMURA
FAIRCHILD
LEM
VAC VACUUMSCHMELZE
EPCOS
nichicon
santon superior switch solutions

AOTAI
Production Capacity

300 Patents

300 R&D Staff

4 R&D Centers

12 Morden Production Lines

2,778,000 Square feet

50% Automation

8 GW Production Capacity

3 Plants

CONTENTS

On-grid Inverter

ASP-3/4/5/6/8/10KTLD

FEATURES

Flexible design

Small size, light weight, support manual installation, reduce user installation and maintenance cost
Multi-communication interface: RS485, GPRS(optional), Wifi (optional)
DC breaker, easy to maintain and safe to use
Convection without fan
Digital DSP control technology

Efficient conversion

Transformerless,max. efficiency is up to 98.1%;
Euro. efficiency is up to 97.6%
Total current THD <2%

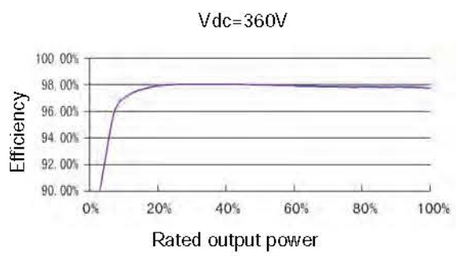
Grid friendly

Active and passive anti-islanding protection
Continuously adjustable active power (0-100%) function

Excellent qualities

CQC Gold Sun Certification, TUV Certification, SAA Certification, CE Certification

EFFICIENCY CURVE



AOTAI

TECHNICAL DATA

Model Name	3KTLD	4KTLD	5KTLD	6KTLD	8KTLD	10KTLD
Input						
Max. DC input power	3900W	5200W	6500W	7200W	9200W	11500W
Max. DC input voltage	550V					
Max. DC input current	15A	15/15A	15/15A	15/15A	20/26A	20/30A
MPPT voltage range	80-550V					
Recommended MPP operating voltage	360V					
No.of MPPT	1	2				
Max. no. of strings per MPPT	1				1/2	
Output						
Rated output power	3000W	4000W	5000W	6000W	8000W	10000W
Max. output power	3.3KVA	4.4KVA	5.5KVA	6kVA	8KVA	10KVA
Max. output current	15A	20A	25A	27A	34.8A	45A
Rated grid voltage	230V					
Grid voltage range	160~270Vac (adjustable)					
Rated grid frequency	50Hz/60Hz					
Grid frequency range	45~55Hz/55~65Hz					
THD	<2% (Under the rated power)					
Power factor	>0.99 (Under the rated power) /Adjustable range: 0.8 leading~0.8 lagging					
DC current injection	<0.5% (Under the rated power)					
System data						
Max. efficiency	98%	98.1%	98.1%	98.1%	98.1%	98.1%
Euro. efficiency	97.5%	97.5%	97.5%	97.5%	97.5%	97.6%
Humidity range	0-100% non-condensing					
Cooling type	Air cooling				Intelligent forced air cooling	
Temperature range	-25~+60℃					
Power consumption at night	< 1W					
Max. working altitude	4000m					
Display	LED/LCD/(optional)					
Communication interface	Wifi/RS485/GPRS(optional)					
Protection						
DC reverse-polarity protection	Yes					
Short circuit protection	Yes					
Output over current protection	Yes					
Output over voltage protection	Yes					
Insulation resistance monitoring	Yes					
Residual current detection	Yes					
Surge protection	Yes					
Grid monitoring	Yes					
Islanding protection	Yes					
Temperature protection	Yes					
Integrated DC switch	Optional					
Mechanical data						
Dimensions (WxHxD)	347x368x167mm				347x368x190mm	
Weight	7Kg	12Kg			11Kg	
Protection class	IP66					
Standard						
Grid-connected standard	NB/T 32004-2018; IEC61727					
Safety standard	NB/T 32004-2018; IEC 62109-1/2					
Electromagnetic compatibility	IEC61000-6-2/4					

On-grid Inverter

ASP-6/8/10/12KTLC

FEATURES

Flexible design

Multi-communication interface: RS485, GPRS(optional), Wifi (optional)
DC breaker, easy to maintain and safe to use
Digital DSP control technology

Efficient conversion

Transformerless,max. efficiency is up to 98.7%; Euro. efficiency is up to 98.2%
Total current THD <2%
Three-level SVPWM control technology, increase DC voltage utilization

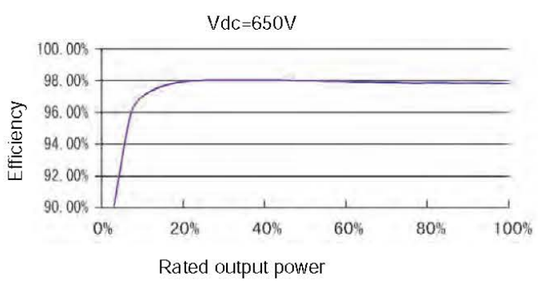
Grid friendly

Adjustable reactive power, power factor from 0.8 leading to 0.8 lagging
Active and passive anti-islanding protection

Excellent qualities

CQC Gold Sun Certification, TUV Certification, SAA Certification, CE Certification

EFFICIENCY CURVE



TECHNICAL DATA

Model Name	6KTLC	8KTLC	10KTLC	12KTLC
Input				
Max. DC input power	7800W	10400W	13000W	15600W
Max. DC input voltage	1100V			
Max. DC input current	18/18A			
MPPT voltage range	180-1000V			
Recommended MPP operating voltage	650V			
No.of MPPT	2			
Max. no. of strings per MPPT	1			
Output				
Rated output power	6000W	8000W	10000W	12000W
Max. output power	6.6kVA	8.8kVA	11kVA	13.2kVA
Max. output current	10A	13.3A	16.7A	20A
Rated grid voltage	400V			
Grid voltage range	310-480Vac			
Rated grid frequency	50Hz/60Hz			
Grid frequency range	45~55Hz/55~65Hz			
THD	<2% (Under the rated power)			
Power factor	>0.99 (Under the rated power) / Adjustable range: 0.8 leading~0.8 lagging			
DC current injection	<0.5% (Under the rated power)			
System data				
Max. efficiency	98.5%	98.5%	98.6%	98.7%
Euro. efficiency	97.9%	98%	98.2%	98.1%
Humidity range	0~100%, non-condensing			
Cooling type	Intelligent forced air cooling			
Temperature range	-25℃~60℃			
Power consumption at night	<1W			
Max. working altitude	4000m			
Display	LED indication / LCD display (Optional)			
Communication interface	Wifi/RS485/GPRS			
Protection				
DC reverse-polarity protection	Yes			
Short circuit protection	Yes			
Output over current protection	Yes			
Output over voltage protection	Yes			
Insulation resistance monitoring	Yes			
Residual current detection	Yes			
Surge protection	Yes			
Grid monitoring	Yes			
Islanding protection	Yes			
Temperature protection	Yes			
Integrated DC switch	Yes			
Mechanical data				
Dimensions (WxHxD)	427x510x190mm			
Weight	15kg			
Protection class	IP66			
Standard				
Grid-connected standard	NB/T 32004-2018; IEC61727			
Safety standard	NB/T 32004-2018; IEC 62109-1/2			
Electromagnetic compatibility	IEC61000-6-2/4			

On-grid Inverter

ASP-15/17/20/23/25/28KTLC

FEATURES

Flexible design

Multi-communication interface: RS485, GPRS(optional), Wifi (optional)
Intelligent forced air cooling
DC breaker, easy to maintain and safe to use
Digital DSP control technology

Efficient conversion

Transformerless,max. efficiency is up to 98.8%; Euro. efficiency is up to 98.2%
Total current THD <2%
Three-level SVPWM control technology, increase DC voltage utilization

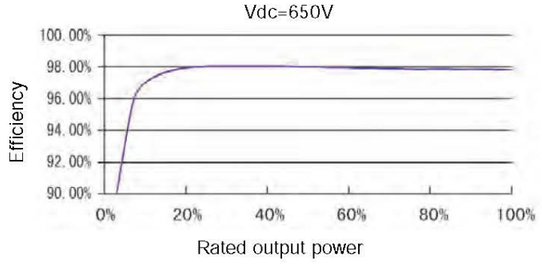
Grid friendly

Adjustable reactive power, power factor from 0.8 leading to 0.8 lagging
Active and passive anti-islanding protection

Excellent qualities

CQC Gold Sun Certification, TUV Certification, SAA Certification, CE Certification

EFFICIENCY CURVE



TECHNICAL DATA

Model Name	15KTLC	17KTLC	20KTLC	23KTLC	25KTLC	28KTLC
Input						
Max. DC input power	19500W	22600W	26000W	29900W	32500W	36400W
Max. DC input voltage	1100V					
Max. DC input current	18/30A		30/30A		36/30A	36/36A
MPPT voltage range	180-1000V					
Recommended MPP operating voltage	650V					
No.of MPPT	2					
Max. no. of strings per MPPT	1/2		2			
Output						
Rated output power	15000W	17000W	20000W	23000W	25000W	28000W
Max. output power	16.5kVA	18.7kVA	22kVA	25.3kVA	27.5kVA	30.8kVA
Max. output current	25A	28.3A	32A	36.5A	42A	45A
Rated grid voltage	400V					
Grid voltage range	310-480Vac					
Rated grid frequency	50Hz/60Hz					
Grid frequency range	45~55Hz/55~65Hz					
THD	<2% (Under the rated power)					
Power factor	>0.99 (Under the rated power) / Adjustable range: 0.8 leading~0.8 lagging					
DC current injection	<0.5% (Under the rated power)					
System data						
Max. efficiency	98.7%			98.8%		
Euro. efficiency	98.2%					
Humidity range	0~100%, non-condensing					
Cooling type	Intelligent forced air cooling					
Temperature range	-25℃~+60℃					
Power consumption at night	<1W					
Max. working altitude	4000m					
Display	LED indication / LCD display (Optional)					
Communication interface	Wifi/RS485/GPRS (Optional)					
Protection						
DC reverse-polarity protection	Yes					
Short circuit protection	Yes					
Output over current protection	Yes					
Output over voltage protection	Yes					
Insulation resistance monitoring	Yes					
Residual current detection	Yes					
Surge protection	Yes					
Grid monitoring	Yes					
Islanding protection	Yes					
Temperature protection	Yes					
Integrated DC switch	Yes					
Mechanical data						
Dimensions (WxHxD)	427x439x212mm					
Weight	18kg					
Protection class	IP66					
Standard						
Grid-connected standard	NB/T 32004-2018; IEC61727					
Safety standard	NB/T 32004-2018; IEC 62109-1/2					
Electromagnetic compatibility	IEC61000-6-2/4					

On-grid Inverter

ASP-30/33/36/40KTLC

FEATURES

Flexible design

Multi-communication interface: RS485, GPRS(optional), Wifi(optional)
DC breaker, easy to maintain and safe to use
Integrated functions of combiner box& DC lightning protection, reduce system cost for users

Efficient conversion

Transformerless,max. efficiency is up to 98.8%;
Euro. efficiency is up to 98.3%
Total current THD <2%
Three-level SVPWM control technology, increase DC voltage utilization

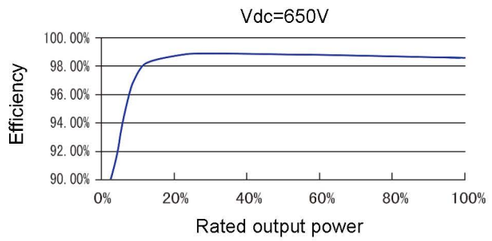
Grid friendly

LVRT function Adjustable reactive power, power factor from 0.8 leading to 0.8 lagging
Active and passive anti-islanding protection

Excellent qualities

CQC Gold Sun Certification, TUV Certification, SAA Certification, CE Certification

EFFICIENCY CURVE



TECHNICAL DATA

Model Name	30KTLC	33KTLC	36KTLC	40KTLC
Input				
Max. DC input power	36000W	39600W	43200W	48000W
Max. DC input voltage	1100V			
MPPT voltage range	250~1000V			
Max. DC input current	45/36A	45/36A	45/45A	45/45A
Recommended MPP operating voltage	650V			
No. of MPPT	2			
Max. no. of strings per MPPT	3/2		3	4
Output				
Rated output power	30000W	33000W	36000W	40000W
Max. output power	33KVA	36.3KVA	39.6KVA	44KVA
Max. output current	48A	53A	56A	65A
Rated grid voltage	400V			
Grid voltage range	310~480Vac			
Rated grid frequency	50Hz/60Hz			
Grid frequency range	45~55Hz/55~65Hz			
THD	< 2% (Under the rated power)			
Power factor	>0.99(under the rated power)/Adjustable range: 0.8 leading ~ 0.8 lagging			
DC current injection	< 0.5% (Under the rated power)			
System data				
Max. efficiency	98.7%	98.7%	98.8%	98.8%
Euro. efficiency	98.1%	98.2%	98.2%	98.3%
Humidity range	0-100% non-condensing			
Cooling type	Intelligent forced air cooling			
Temperature range	-25~+60℃			
Power consumption at night	< 1W			
Max. working altitude	4000m			
Display	LED indicator /LCD displayer (optional)			
Communication interface	Wifi/RS485/GPRS(optional)			
Protection				
DC reverse-polarity protection	Yes			
Short circuit protection	Yes			
Output over current protection	Yes			
Output over voltage protection	Yes			
Insulation resistance monitoring	Yes			
Residual current detection	Yes			
Surge protection	Yes			
Grid monitoring	Yes			
Islanding protection	Yes			
Temperature protection	Yes			
Integrated DC switch	Yes			
Mechanical data				
Dimensions (WxHxD)	552x482x209mm			
Weight	32Kg			
Protection class	IP66			
Standard				
Grid-connected standard	NB/T 32004-2018；IEC61727			
Safety standard	NB/T 32004-2018；IEC 62109-1/2			
Electromagnetic compatibility	IEC61000-6-2/4			

On-grid Inverter

ASP-50/60KTLC,70/75KTLC-HV

FEATURES

Flexible design

Multi-communication interface: RS485, GPRS(optional), Wifi(optional)
DC breaker, easy to maintain and safe to use
Integrated functions of combiner box& DC lightning protection, reduce system cost for users

Efficient conversion

Transformerless,max. efficiency is up to 99%; Euro. efficiency is up to 98.5%
Total current THD <2%
Three-level SVPWM control technology, increase DC voltage utilization

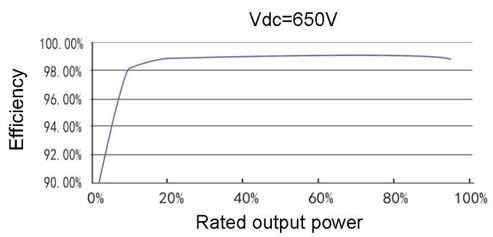
Grid friendly

LVRT HVRT function
Adjustable reactive power, power factor from 0.8 leading to 0.8 lagging
Active and passive anti-islanding protection
Continuously adjustable active power (0-100%) function

Excellent qualities

CQC Gold Sun Certification, TUV Certification, SAA Certification, CE Certification

EFFICIENCY CURVE

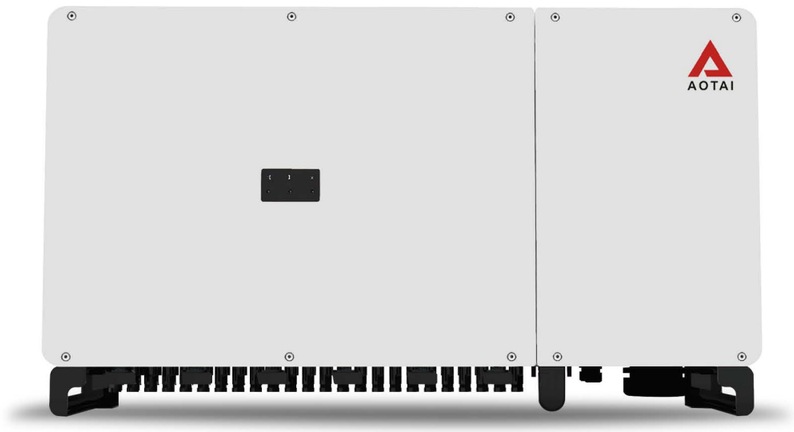


TECHNICAL DATA

Model Name	50KTLC	60KTLC	70KTLC-HV	75KTLC-HV
Input				
Max. DC input power	65000W	78000W	91000W	97500W
Max. DC input voltage	1100V			
Max. DC input current	45/45/45A			
MPPT voltage range	250~1000V			
Recommended MPP operating voltage	650V		740V	
No. of MPPT	3			
Max. no. of strings per MPPT	3	4		
Output				
Rated output power	50000W	60000W	70000W	75000W
Max. output power	55KVA	66KVA	77KVA	82.5KVA
Max. output current	80A	96A	89A	95A
Rated grid voltage	400V		500V	
Grid voltage range	310~480Vac		422~550Vac	
Rated grid frequency	50Hz/60Hz			
Grid frequency range	45~55Hz/55~65Hz			
THD	< 2% (Under the rated power)			
Power factor	>0.99(rated power) /0.8 leading ~ 0.8 lagging			
DC current injection	< 0.5% (Under the rated power)			
System data				
Max. efficiency	98.7%	98.9%	99%	
Euro. efficiency	98.3%	98.5%	98.5%	
Humidity range	0-100% non-condensing			
Cooling type	Intelligent forced air cooling			
Temperature range	-25~+60℃			
Power consumption at night	< 1W			
Max. working altitude	4000m			
Display	LED/LCD(optional)			
Communication interface	RS485/Wifi/GPRS(optional)			
Protection				
DC reverse-polarity protection	Yes			
Short circuit protection	Yes			
Output over current protection	Yes			
Output over voltage protection	Yes			
Insulation resistance monitoring	Yes			
Residual current detection	Yes			
Surge protection	Yes			
Grid monitoring	Yes			
Islanding protection	Yes			
Temperature protection	Yes			
Integrated DC switch	Yes			
Mechanical data				
Dimensions (WxHxD)	681x660x282mm			
Weight	47Kg			
Protection class	IP66			
Standard				
Grid-connected standard	NB/T 32004-2018；IEC61727			
Safety standard	NB/T 32004-2018；IEC 62109-1/2			
Electromagnetic compatibility	IEC61000-6-2/4			

On-grid Inverter

ASP-80/90/100/110/125KTLC



FEATURES

Flexible design

Multi-communication interface: RS485, GPRS(optional), Wifi(optional)
DC breaker, easy to maintain and safe to use
Integrated functions of combiner box& DC lightning protection, reduce system cost for users

Efficient conversion

Transformerless,max. efficiency is up to 98.9%; Euro. efficiency is up to 98.2%
Total current THD <2%
Three-level SVPWM control technology, increase DC voltage utilization

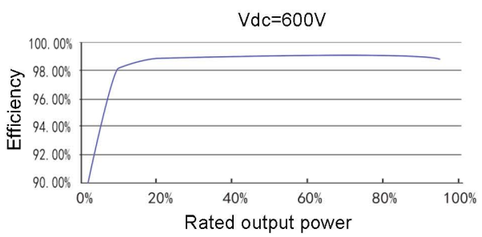
Grid friendly

LVRT HVRT function
Adjustable reactive power, power factor from 0.8 leading to 0.8 lagging
Active and passive anti-islanding protection
Continuously adjustable active power (0-100%) function

Excellent qualities

CQC Gold Sun Certification, TUV Certification, SAA Certification, CE Certification

EFFICIENCY CURVE

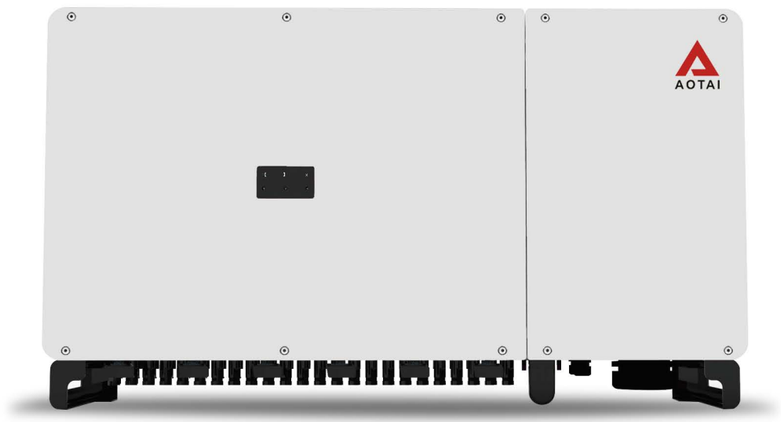


TECHNICAL DATA

Model Name	80KTLC	90KTLC	100KTLC	110KTLC	125KTLC
Input					
Max. DC input power	120KW	135KW	150KW	165KW	187.5KW
Max. DC input voltage	1100V				
Max. DC input current	30A*8	30A*9	30A*10	30A*10	30A*10
MPPT voltage range	200~1000V				
Recommended MPP operating voltage	600V				
No. of MPPT	8	9	10	10	10
Max. no. of strings per MPPT	2				
Output					
Rated output power	80KW	90KW	100KW	110KW	125KW
Max. output power	88KVA	99KVA	110KVA	121KVA	137.5KVA
Max. output current	127A	142.9A	158.8A	174.6A	199.3A
Rated grid voltage	400V				
Grid voltage range	310~480Vac				
Rated grid frequency	50Hz/60Hz				
Grid frequency range	45~55Hz/55~65Hz				
THD	< 2% (Under the rated power)				
Power factor	>0.99(rated power) /0.8 leading ~ 0.8 lagging				
DC current injection	< 0.5% (Under the rated power)				
System data					
Max. efficiency	98.6%	98.6%	98.7%	98.7%	98.9%
Euro. efficiency	98.1%	98.1%	98.1%	98.1%	98.2%
Humidity range	0-100% non-condensing				
Cooling type	Intelligent forced air cooling				
Temperature range	-25~+60℃				
Power consumption at night	< 1W				
Max. working altitude	4000m				
Display	LED/LCD(optional)				
Communication interface	RS485/Wifi/GPRS(optional)				
Protection					
DC reverse-polarity protection	Yes				
Short circuit protection	Yes				
Output over current protection	Yes				
Output over voltage protection	Yes				
Insulation resistance monitoring	Yes				
Residual current detection	Yes				
Surge protection	Yes				
Grid monitoring	Yes				
Islanding protection	Yes				
Temperature protection	Yes				
Integrated DC switch	Yes				
Mechanical data					
Dimensions (WxHxD)	1050x620x333mm				
Weight	89Kg				
Protection class	IP66				
Standard					
Grid-connected standard	NB/T 32004-2018; IEC61727				
Safety standard	NB/T 32004-2018； IEC 62109-1/2				
Electromagnetic compatibility	IEC61000-6-2/4				

On-grid Inverter

ASP-100/125/136K-HV



FEATURES

Flexible design

Multi-communication interface: RS485, GPRS(optional), Wifi(optional)
DC breaker, easy to maintain and safe to use
Integrated functions of combiner box& DC lightning protection, reduce system cost for users

Efficient conversion

Transformerless,max. efficiency is up to 98.9%; Euro. efficiency is up to 98.4%
Total current THD <2%
Three-level SVPWM control technology, increase DC voltage utilization

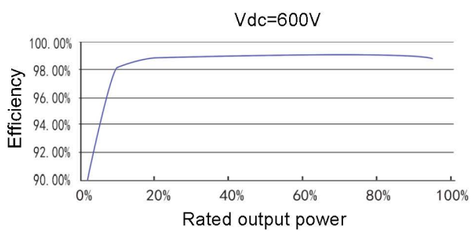
Grid friendly

LVRT HVRT function
Adjustable reactive power, power factor from 0.8 leading to 0.8 lagging
Active and passive anti-islanding protection
Continuously adjustable active power (0-100%) function

Excellent qualities

CQC Gold Sun Certification, TUV Certification, SAA Certification, CE Certification

EFFICIENCY CURVE



TECHNICAL DATA

Model Name	100K-HV	125K-HV	136K-HV
Input			
Max. DC input power	150KW	187.5KW	204KW
Max. DC input voltage		1100V	
Max. DC input current		30AX10	
MPPT voltage range		200~1000V	
Recommended MPP operating voltage		720V	
No. of MPPT		10	
Max. no. of strings per MPPT		2	
Output			
Rated output power	100KW	125KW	136KW
Max. output power	110KVA	137.5KVA	149.5KVA
Max. output current	127A	158.8A	172.6A
Rated grid voltage		500V	
Grid voltage range		422~550Vac	
Rated grid frequency		50Hz/60Hz	
Grid frequency range		45~55Hz/55~65Hz	
THD		< 2% (Under the rated power)	
Power factor		>0.99(rated power) /0.8 leading ~ 0.8 lagging	
DC current injection		< 0.5% (Under the rated power)	
System data			
Max. efficiency	98.9%	98.9%	98.9%
Euro. efficiency	98.3%	98.4%	98.4%
Humidity range		0-100% non-condensing	
Cooling type		Intelligent forced air cooling	
Temperature range		-25~+60℃	
Power consumption at night		< 1W	
Max. working altitude		4000m	
Display		LED/LCD(optional)	
Communication interface		RS485/Wifi/GPRS(optional)	
Protection			
DC reverse-polarity protection		Yes	
Short circuit protection		Yes	
Output over current protection		Yes	
Output over voltage protection		Yes	
Insulation resistance monitoring		Yes	
Residual current detection		Yes	
Surge protection		Yes	
Grid monitoring		Yes	
Islanding protection		Yes	
Temperature protection		Yes	
Integrated DC switch		Yes	
Mechanical data			
Dimensions (WxHxD)		1050x620x333mm	
Weight		89Kg	
Protection class		IP66	
Standard			
Grid-connected standard		NB/T 32004-2018；IEC61727	
Safety standard		NB/T 32004-2018；IEC 62109-1/2	
Electromagnetic compatibility		IEC61000-6-2/4	

On-grid Inverter

ASP-196/225K-EHV

FEATURES

Flexible design

Multi-communication interface: RS485, GPRS(optional), Wifi(optional)
DC breaker, easy to maintain and safe to use
Integrated functions of combiner box& DC lightning protection, reduce system cost for users

Efficient conversion

Transformerless,max. efficiency is up to 99.02%; Euro. efficiency is up to 98.51%
Total current THD <3%
Three-level SVPWM control technology, increase DC voltage utilization

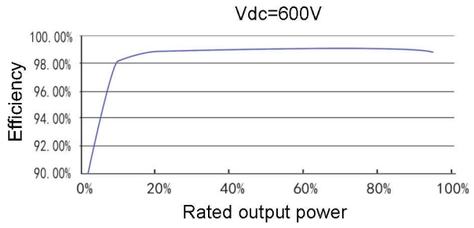
Grid friendly

LVRT HVRT function
Adjustable reactive power, power factor from 0.8 leading to 0.8 lagging
Active and passive anti-islanding protection
Continuously adjustable active power (0-100%) function

Excellent qualities

CQC Gold Sun Certification, TUV Certification, SAA Certification, CE Certification

EFFICIENCY CURVE

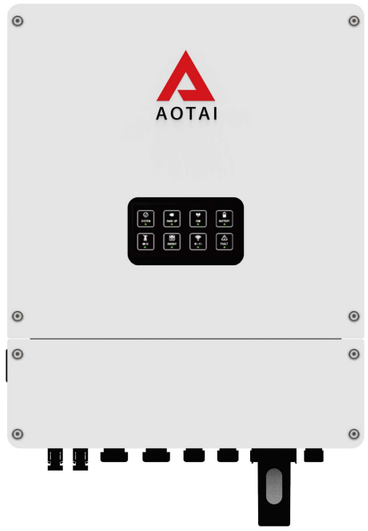


TECHNICAL DATA

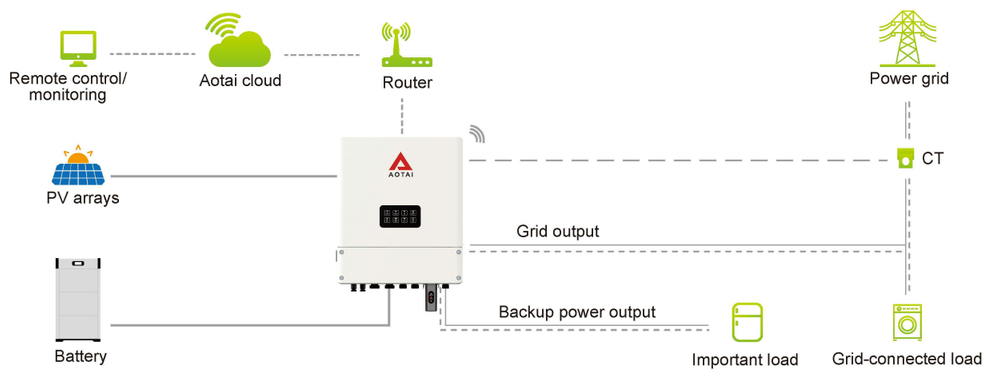
Model Name	196K-EHV	225K-EHV
Input		
Max. DC input power	294KW	337.5KW
Max. DC input voltage	1500V	
Max. DC input current	40A*8	40A*12
MPPT voltage range	500~1500V	
Recommended MPP operating voltage	1080V	
No. of MPPT	8	12
Max. no. of strings per MPPT	2	
Output		
Rated output power	196KW	225KW
Max. output power	216KVA	247.5KVA
Max. output current	155.9A	178.7A
Rated grid voltage	800V	
Grid voltage range	640~920Vac	
Rated grid frequency	50Hz/60Hz	
Grid frequency range	45~55Hz/55~65Hz	
THD	< 3% (Under the rated power)	
Power factor	>0.99(rated power) /0.8 leading ~ 0.8 lagging	
DC current injection	< 0.5% (Under the rated power)	
System data		
Max. efficiency	99.01%	99.02%
Euro. efficiency	98.50%	98.51%
Humidity range	0-100% non-condensing	
Cooling type	Intelligent forced air cooling	
Temperature range	-30~+60℃	
Power consumption at night	≤ 2W	
Max. working altitude	5000m (>4000 derating)	
Display	LED/LCD(optional)	
Communication interface	RS485/Wifi/GPRS(optional)	
Protection		
DC reverse-polarity protection	Yes	
Short circuit protection	Yes	
Output over current protection	Yes	
Output over voltage protection	Yes	
Insulation resistance monitoring	Yes	
Residual current detection	Yes	
Surge protection	Yes	
Grid monitoring	Yes	
Islanding protection	Yes	
Temperature protection	Yes	
Integrated DC switch	Yes	
Mechanical data		
Dimensions (WxHxD)	1008x700x351mm	
Weight	86Kg	96Kg
Protection class	IP66	
Standard		
Grid-connected standard	NB/T 32004-2018；IEC61727	
Safety standard	NB/T 32004-2018；IEC 62109-1/2	
Electromagnetic compatibility	IEC61000-6-2/4	

Hybrid Inverter

AEP-3KS/3K6S/4KS/4K6S/5KS/6KS48P



Smart Energy Solutions

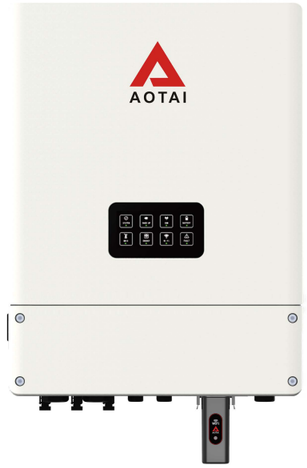


TECHNICAL DATA

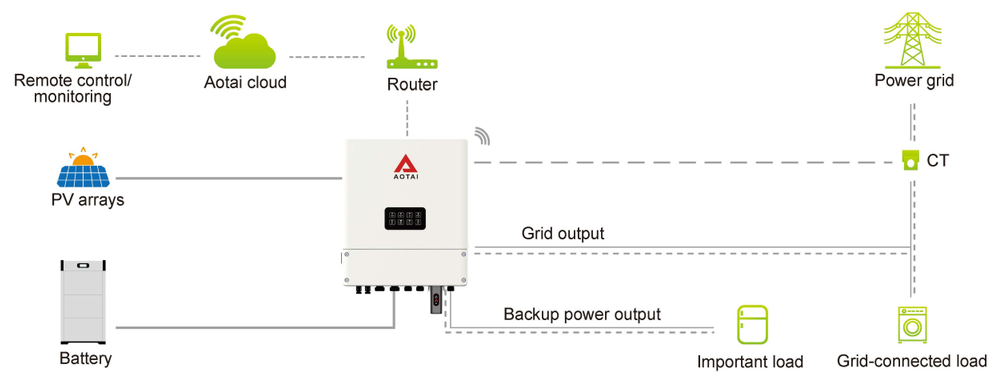
Modle	AEP-3KS48P	AEP-3K6S48P	AEP-4KS48P	AEP-4K6S48P	AEP-5KS48P	AEP-6KS48P
Battery input data						
Battery Type	Lithium or lead acid battery					
Rated battery voltage(V)	48					
Maximum charging voltage(V)	≤60 (Configurable)					
Maximum charge/discharge current(A)	120					
PV input data						
Maximum DC input voltage(V)	500					
MPPT Operating voltage range(V)	100~500					
Starting voltage(V)	125					
Maximum input current(A)	18	18/18	18/18	18/18	18/18	18/18
MPPT number	1	2	2	2	2	2
AC output parameters (On-Grid)						
Maximum output apparent power (KW)	3300	3960	4400	5060	5500	6000
Rated output voltage(V)	230					
Rated output frequency(Hz)	50/60HZ					
Max output current(A)	15	18	19	22	25	27
Output power factor	~1 (-0.8 leading~+0.8 lagging)					
AC output parameters(Off-Grid)						
Rated output apparent power(VA)	3000	3600	4000	4600	5000	6000
Maximum output apparent power(VA)	6000,15sec	7200,15sec	8000,15sec	9200,15sec	10000,15sec	10000,15sec
Rated output voltage(V)	230(±2%)					
Rated output frequency(Hz)	50/60(±0.2%)					
Max output current(A)	15	18	19	22	25	27
Efficiency						
Max efficiency(PV)	97.6%					
Max efficiency(cell)	94.5%					
Europe efficiency	97%					
Protection						
PV input reverse polarity protection	Yes					
PV insulation resistance detection	Yes					
Residual current detection	Yes					
Output over current protection	Yes					
Output short circuit protection	Yes					
Output over voltage protection	Yes					
Basic data						
Operation temperature (°C)	-25~60					
Storage temperature (°C)	-30~65					
Relative humidity	0~95%					
Working altitude (m)	≤4000					
Cooling	Air cooling					
Noise (db)	<25					
Weight (Kg)	19					
Size (width x height x depth) (mm)	424*555*197					
Protection class	IP66					
Topology	HF isolation (Battery side)					

Hybrid Inverter

AEP-8 /10 /12KS48P3



Smart Energy Solutions



TECHNICAL DATA

Modle	AEP-8KS48P3	AEP-10KS48P3	AEP-12KS48P3
Battery input data			
Battery Type		Lithium or lead acid battery	
Rated battery voltage(V)		48	
Maximum charging voltage(V)		≤60 (Configurable)	
Maximum charge/discharge current(A)	190	210	240
PV input data			
Maximum DC input voltage(V)		1000	
MPPT Operating voltage range(V)		150~800	
Starting voltage(V)		150	
Maximum input current(A)	18/18	36/18	36/18
MPPT number	2	2	2
AC output parameters (On-Grid)			
Maximum output apparent power (VA)	8800	11000	13200
Rated output voltage(V)		400	
Rated output frequency(Hz)		50/60HZ	
Max output current(A)	18	23	27
Output power factor		~1 (-0.8 leading~+0.8 lagging)	
AC output parameters(Off-Grid)			
Rated output apparent power(VA)	8000	10000	12000
Maximum output apparent power(VA)	16000,15sec	20000,15sec	24000,15sec
Rated output voltage(V)		400(±2%)	
Rated output frequency(Hz)		50/60(±0.2%)	
Max output current(A)	18	23	27
Efficiency			
Max efficiency(PV)		98%	
Max efficiency(battery)		94.5%	
Europe efficiency		97.5%	
Protection			
PV input reverse polarity protection		Yes	
PV insulation resistance detection		Yes	
Residual current detection		Yes	
Output over current protection		Yes	
Output short circuit protection		Yes	
Output over voltage protection		Yes	
Basic data			
Operation temperature (°C)		-25~60	
Storage temperature (°C)		-30~65	
Relative humidity		0~95%	
Working altitude (m)		≤4000	
Cooling		Air cooling	
Noise (db)		<25	
Weight (Kg)		35	
Size (width x height x depth) (mm)		475X683X256	
Protection class		IP66	
Topology		HF isolation （Battery side)	

Monitoring - Information Collector

GPRS/Wifi/NET RTU GPRS 4G/Wifi RTU-USB

GPRS4G-USB

Wifi RTU-USB

PRODUCT INTRODUCTION

Information collector is used for data collection and monitoring of solar inverters, combiner box and environment monitor in PV power stations. This device has RS485/Ethernet, and USB data communication interface. This makes it compatible with many equipments and reduce system cost.

TECHNICAL DATA

Model Name	GPRS/WiFi/NET RTU	GPRS4G/WiFi RTU-USB
Communication		
Inverter communication	RS485	
PC communication	-	
Server	GPRS/ WiFi/ Ethernet	GPRS/ WiFi
Max. number of connections		
RS485 terminal	32	1
Max. communication range		
RS485	1200m	0m
Ethernet	-/-/ 100m	-
Wireless (open field)	unlimited/ 20m/ -	unlimited/ 20m
Power supply		
Power module	AC 220V to DC 12V	DC 12V
Input voltage	DC12V	DC12V
Power consumption	1W(avg)/ 3W(max)	
Environmental conditions		
Ambient temperature	-20℃~+60℃	
Humidity	0~100%,non-condensing	
Other data		
Dimensions (WxHxD)	145x72x28mm	52x104x34mm
Weight	390g	100g
Protection class	IP20	IP65(After installation)
Installation	Wall bracket Tabletop	On the inverter
Language	China,English	China,English

Monitoring – ATSolar APP

ATSolar APP

FEATURES

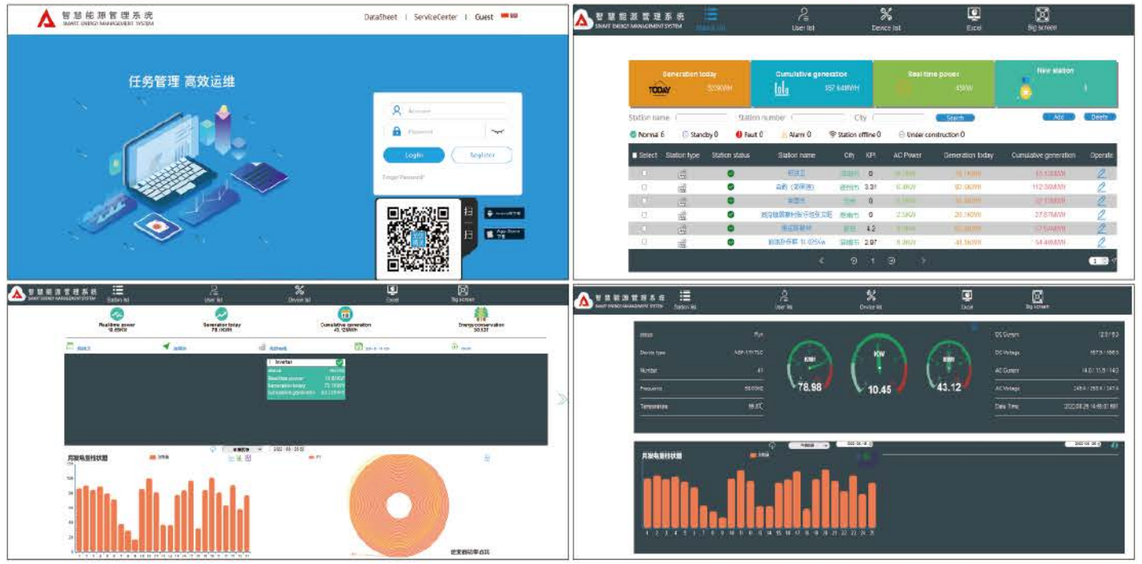
- Delicate interface, precise data, easy to operate, download and install, real-time monitoring, data synchronism
- 24-hour monitoring
- Real-time update of weather forecast
- Rich data output interfaces, support Android, IOS
- Low maintenance cost
- Periodic refresh of dynamic information
- Power station information sharing function

PRODUCT INTRODUCTION

ATSolarAPP is intelligent terminal for PV power station monitoring and management person. It help user master PV power station running status at anytime and anywhere, realize remote data monitoring of PV power station, ensure convenient management and monitoring timeliness. System displays PV power station running data by visual table, includes power station power generation, benefit, CO2 emission reduction benefit, equipment running status, equipment real-time data, history data query, power generation comparison, equipment performance comparison. As fashion and intelligent application, it can let user demonstrate his PV power station at any occasion, user has intuitive feeling, enhance user confidence.

Monitoring-Remote Monitoring System

AT Solar Info PV power station monitoring system



FEATURES

Inverter management

Nobody monitoring needs, 7X24h stable running Manage grid-connected inverter, add data of newly communication net connected inverter to management system by add function, also can move current inverter data output of management system by delete function.

Real-time system monitoring

Information monitoring function real-time monitor system, display system running parameter, know system running status precisely by displayed information.

Precise data statistic

This function can make statistic history data of inverter on a certain time range, and output by Excel format Information collection and management of combiner box, DC distribution cabinet, inverter, transformer,etc.

Detailed history tracking

Take out system data in a certain time duration, and display in curve type, user can know system running efficiency

Precise design

Friendly interface, easy to operate, integrated power station monitoring, running, management, provide better operation experience

PRODUCT INTRODUCTION

This system includes inverter, communication network and upper computer, has advantages like high real-timeliness, high reliability, simple wiring and remote monitoring and management. With communication technology, auto-control technology, computer technology, to realize PV power station monitoring, running and management functions, provide economic, reliable and safe solution for PV power station intelligent, automating, unmanned management. This APP suits for all kinds of PV power station, provides PV integrated monitoring and running program, realize complete real-time monitoring, control and management for PV power station.

http://www.aotaicloud.com, to realize real-time monitoring and management for your power station.

AOTAI Projects Reference

AOTAI

35 MW

China

1 MW

China

10 KW

Pakistan

2 MW

China

5 KW

Pakistan

10 KW

Pakistan

AOTAI

10 KW

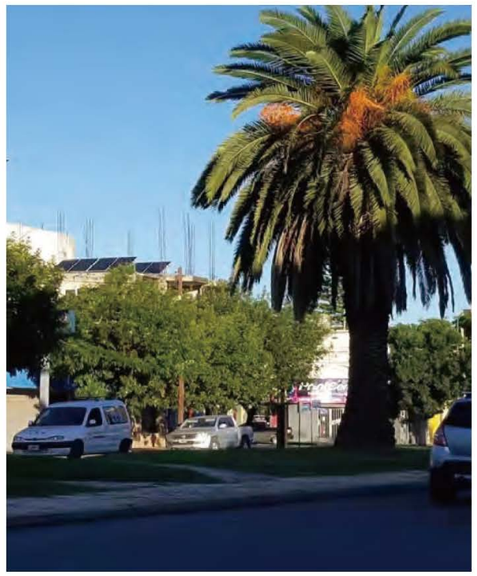
Pakistan

5 KW

Argentina

5 KW

Argentina



5 KW

Storage, Vietnam

30 MW

China

6 MW

China

10 KW

Pakistan

20 KW

Pakistan

34 MW

China

200 KW

Singapore

800 KW

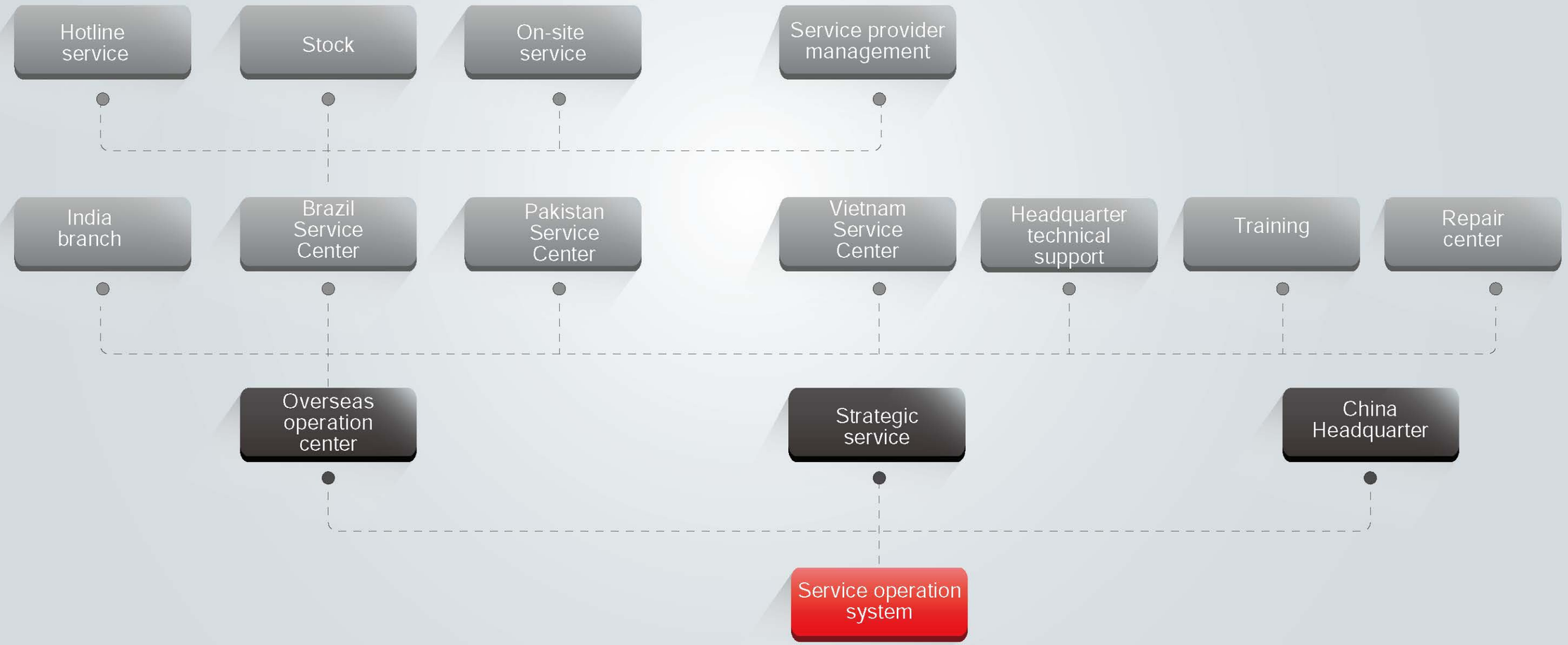
Pakistan

AOTAI After-sales Service

128 COUNTRIES

AOTAI

Service guarantee —Service system



Service guarantee —Service system

24/7

AOTAI

Good service system

Aotai service system guarantees benefits of global customers in all aspects!

Comprehensive service support

Aotai service is localized and provides comprehensive support for pre-sales, installation and after-sales services.

Timely delivery

Timely supply products to local market and respond quickly to customer needs.

After-sale warranty

Aotai provides customers with customized warranty service. During warranty period, users enjoy maintenance and equipment replacement services.