



Complete Solutions for Solar Power



CATALOGUE 2018

www.aotaielectric.com



Focus on power electronic equipment research

Explore new ideas for industry development

Introduction

Aotai Electric is the leading manufacturer of inverter machines in China. We introduce experienced professionals from Shandong University, and expertise in electric power equipments R&D, manufacture and selling. In 2002, we were named one of the National Torch Plan Hi-Tech Enterprise, and our core technologies have been awarded National Science and Technology Advancement silver award in 2004.

Solar inverters include String PV Inverters and central inverters which are commonly applied on roof top, huge power station. Energy-saving projects become one of our company core business.

Aotai is oriented by providing our valuable customer best qualified products, creating more value for them. Our products are designed based on cost performance, high quality with less downtime and all our employees work for this mission.



Shandong university



Factory I :1999,Jining (28,000 square feet)



Factory II :2005,Zichuan (28,000 square feet)



Headquarter:2006, Jinan (50,000 square feet)



Factory III :2013,Jinan (28,000 square feet)

Enterprise honor



- National hi-tech enterprise
- National Science and Technology Progress Award Second Prize
- National Torch Plan Hi-Tech Enterprise
- National Ministry of Education Second Prize
- National Torch Plan four projects
- National Science and Technology Invention Award
- National-local unite engineering lab identified by National Development and Reform Commission
- Shandong province Science and Technology Progress Award First Prize
- Shandong province hi-tech enterprise
- Shandong province enterprises using advanced technology
- Shandong province first batch "Science and technology enterprise key contact unit"
- Shandong province Quality Management Advanced Enterprise
- Shandong province Science and Technology Progress Award Second and Third Prize, total is 10
- Shandong province technological innovation project - three projects Shandong province scientific and technological research project - one project
- Jinan hi-tech excellent enterprise
- Jinan high-development zone Star Enterprise
- Jinan innovative enterprises
- Intellectual Property & Patent Experimental Unit identified by Jinan Science and Technology Division and Jinan IPO (Intellectual Property Office)
- More than 50 patented technologies

R&D Team

Aotai actively introduces advanced technology at home and abroad, also pay attention to the development of its own R&D team. Rely on qualified teachers and technical strength of Shandong University, Aotai creates its superior R&D team composed of university professor, doctoral advisor, doctor, master, overseas returnees engineer, senior engineer and excellent graduate, possess technical authority in power electronic technology application and new energy field, take part in multi provincial level and national level key science and technology research projects, and organizes many national standards drafting.



Production Capacity

Aotai has three production bases: Zichuan, Jining and Jinan, covers an area of 270,000 m², with more than 1000 employees, has 28 assembling lines, 9 components production lines, 18 debugging, aging and test production lines to ensure products supply. Also Aotai has advanced production and test equipment like PCB autowave-soldering equipment, three-proof sealing equipment, inverter performance digital test equipment, PCB SMT equipment, non-toxic test equipment.



Quality Control

Inspecting Incoming Components

We choose the suppliers very carefully and build long-term cooperation with those high qualified suppliers. Before accepting parts from our suppliers, we run the components through specific quality control tests to ensure that they are durable and reliable.



Monitoring Manufacturing Processes

Along with the inspection of raw material, a specific QA committee designs detailed documentation regarding every process. These documents are used to train new as well as current employees, to make sure that each employee is familiar with the manufacturing procedure before

actually performing the task in the plant. This significantly reduce the operational mistakes that are the main causes of slow production rate and excessive mal-functioning products. Furthermore, trainees have the ability to review each step of their specific task even if the equipment is not up and running.

A QA committee reviews these manufacturing process documents once each year. During the review, efficiencies and deficiencies can be identified for all operations, and improvements can be made that increase the efficiency and quality of each process.

By the end of each key process, experienced QA inspectors will follow the specified inspection procedure to plan, monitor, and document all required tests for the parts.

Inspecting Finished Products

Aotai also have safe, manageable and efficient quality assurance procedures for their finished product. The inspection of the final product verifies if the product has all the proper components and meets established specifications. This is one of the most important quality checks for our company. These final inspections include:

- System specification checks and adjustments
- Sign-offs by qualified personnel

When testing on the units is completed, all procedures, inspection logs of the completed tests, along with the results of each test are recorded in an organized system. The logs that contain the final quality checks are the final check point that ensures the quality of every product.

Responding to Customer Complaints

Aotai takes every customer complaint very seriously. We record all customer complaints, this information helps us discover any recurring problem in the manufacturing process and improve our products.



Recognized Quality

- 1998 - Passed the ISO 9000
- 2004 - Passed the ISO 9001: 2000
- 2007 - Obtained CE certificates
- 2010 - Passed the ISO 9001: 2008
- 2011 - Passed the TUV(Europe)
- 2011 - Passed the SAA(Australia)
- 2011 - Passed the Golden Sun
- 2012 - Passed the LVRT
- 2014 - Passed the ZVRT
- 2011 - Passed the China efficiency level certification: A level



We Promise

- On-site service during commissioning and post commissioning
- Quick service response time
- Local availability of spare parts and inverters
- Long working hours per day, high conversion efficiency, and low loss make high power generation

INDEX



One-Stop
Solutions

String PV Inverters

07

- HF Transformer Isolation
ASP-1.5/2/2.5/3KHF ASP-4/5KHF
- Transformerless
ASP-1.5/2/2.5/3KTLD ASP-4/5/6KTLD ASP-7/8KTLD
ASP-8/10/12KTLC ASP-15/17/20KTLC ASP-22/25/30/33/40KTLC ASP-50/60KTLC

Central PV Inverters

19

- PF Transformer Isolation
ASP-30/50K ASP-100/250K ASP-500/630K
- Transformerless
ASP-500KTL ASP-630KTL
- PF Transformer Inverter Container-type
ANBF-1000K
- Transformerless Inverter Container-type
ANBF-1000KTL

Accessories

27

AC Combiner Box DC Combiner Box AC Distribution Cabinet
Environment Monitoring Device

Monitoring

32

- Distributed PV Power Station Remote Monitoring System
- Information Collector: GPRS/Wifi/NET RTU GPRS/Wifi RTU-USB
- PV Power Station Monitoring System: ATSolar APP Monitoring System ATSolarInfo

EPC

36

Our Projects

38

String-HF Transformer Isolation

HF series



ASP-1.5/2/2.5/3KHF



ASP-4/5KHF

Key components

Multi-Contact MC
Multi-Contact(Switzerland)
Item: PV cable connector
Standard: MC4

Littelfuse
Littelfuse (United States)
Item: DC side fuse
AC side fuse
Standard: 600V/30A
250V/30A

Infineon
Infineon (Germany)
Item: Power MOSFET
Power IGBT tube
Standard: Coolmos(650V/47A)
600V/50A

IXYS
IXYS (United States)
Item: Fast recovery diode
Standard: 600V/30A

NIPPON CHEMI-CON
NCC (Japan Kingbox)
Item: Electrolytic capacitor
Standard: 500V/390μF

LEM
LEM(Germany)
Item: Current sensor
Standard: HX 20-P

OMRON
OMRON(Japan)
Item: Relay
Standard: G8P-1A4P

ATMEL
ATMEL(United States)
Item: Main controller
Standard: ATmega64A

Spare parts



PV-KBT4
MC4



PV-KST4
MC4



sealing washer

ASP-1.5/2/2.5/3KHF

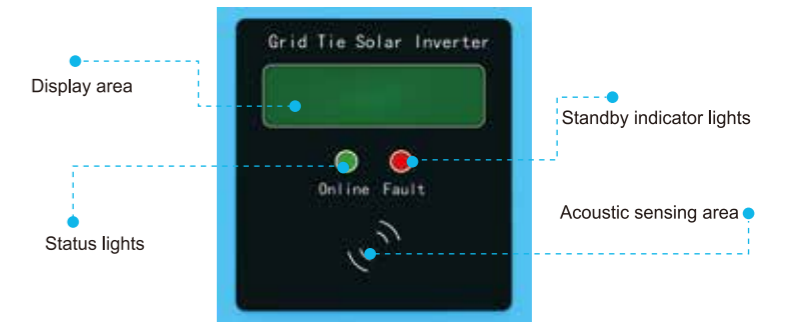
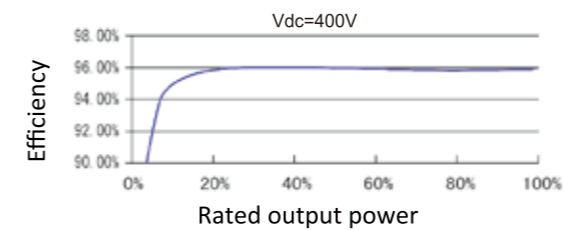


Features

- Flexible design**
Small size, light weight, support manual installation, reduce user installation and maintenance cost.
Multi-communication interface: RS485, GPRS(optional), Wifi (optional)
Convection without fan
- Efficient conversion**
Max. efficiency is up to 96%; Euro. efficiency is up to 95%
Total current THD <2%
Wide DC voltage input range, max. is up to 600V
- 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



Technical Data

	1.5KHF	2KHF	2.5KHF	3KHF		1.5KHF	2KHF	2.5KHF	3KHF
Input					System data				
Max. DC input power	1800W	2400W	3000W	3600W	Max. efficiency			96%	
Max. DC input voltage			600V		Euro. efficiency			95%	
Max. DC input current	8A	11A	13A	16.7A	Humidity range		0-95% non-condensing		
MPPT voltage range			195~550V		Cooling type		Air cooling		
Recommended MPP operating voltage			400V		Temperature range		-25~+60 C		
No. of MPPT			1		Power consumption at night		< 2W		
Max. no. of strings per MPPT			2		Max. working altitude		2000m		
Output					Display		Two line LCD/Two LEDs/One voice operated switch		
Rated output power	1500W	2000W	2500W	3000W	Communication interface		RS485/GPRS(optional) /Wifi(optional)		
Max. output power	1.65KVA	2.2KVA	2.75KVA	3.3KVA	Mechanical data				
Max. output current	7.5A	10A	12.5A	15A	Dimensions (WxHxD)		408x390x190mm		
Rated grid voltage			230V		Weight		16Kg		
Grid voltage range			180~260Vac		Protection class		IP65		
Rated grid frequency			50Hz/60Hz		Standard				
Grid frequency range			47~51.5Hz/57~61.5Hz		Grid-connected standard		NB/T32004-2013; GB/T19964-2012		
THD			< 2% (Under the rated power)		Safety standard		NB/T32004-2013; IEC 62109-1/2		
Power factor			> 0.99 (Under the rated power)		Electromagnetic compatibility		IEC 61000-6-2/4		
DC current injection			< 0.5% (Under the rated power)						

ASP-4/5KHF

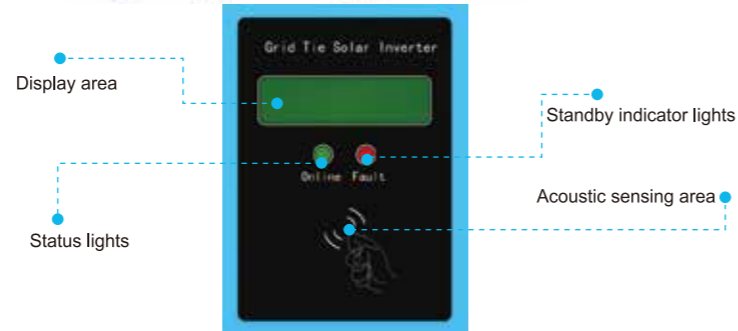
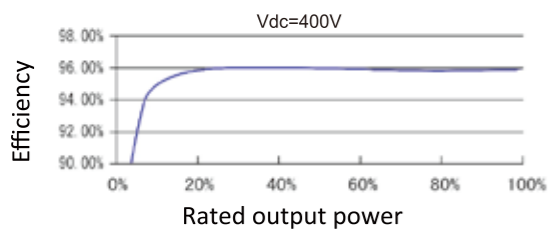


Features

- Flexible design**
Small size, light weight, support manual installation, reduce user installation and maintenance cost. Multi-communication interface: RS485, GPRS(optional), wifi(optional)
Convection without fan
- Efficient conversion**
Max. efficiency is up to 96%; Euro. efficiency is up to 95%
Total current THD <2%
Wide DC voltage input range, max. is up to 600V
- 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



Technical Data

Input	4KHF	5KHF	System data	4KHF	5KHF
Max. DC input power	4800W	6000W	Max. efficiency		96%
Max. DC input voltage		600V	Euro. efficiency		95%
Max. DC input current	16.7A	18.8A	Humidity range		0-95% non-condensing
MPPT voltage range		280~550V	Cooling type		Air cooling
Recommended MPP operating voltage		400V	Temperature range		-25~+60 C
No. of MPPT		1	Power consumption at night		< 2W
Max. no. of strings per MPPT		2	Max. working altitude		2000m
Output			Display	Two line LCD/Two LEDs/One voice operated switch	
Rated output power	4000W	5000W	Communication interface	RS485/GPRS(optional)/Wifi(optional)	
Max. output power	4.4KVA	5.25KVA	Mechanical data		
Max. output current	20A	22.8A	Dimensions (WxHxD)	408x580x160mm	
Rated grid voltage		230V	Weight	24Kg	
Grid voltage range		180~260Vac	Protection class	IP65	
Rated grid frequency		50Hz/60Hz	Standard		
Grid frequency range		47~51.5Hz/57~61.5Hz	Grid-connected standard	NB/T32004-2013; GB/T19964-2012	
THD		< 2% (Under the rated power)	Safety standard	NB/T32004-2013; IEC 62109-1/2	
Power factor		> 0.99 (Under the rated power)	Electromagnetic compatibility	IEC 61000-6-2/4	
DC current injection		< 0.5% (Under the rated power)			

TLD series



ASP-1.5/2/2.5/3KTLD



ASP-4/5/6KTLD



ASP-7/8KTLD

Key components

- Multi-Contact** (Switzerland)
Item: PV
Standard: MC4
- Littelfuse** (United States)
Item: DC side fuse
AC side fuse
Standard: 600V/30A
250V/30A
- Infineon** (Germany)
Item: Power MOSFET
Power IGBT
Standard: Coolmos (650V/47A)
600V/50A
- ROHM** (Japan)
Item: Silicon carbide diode
Standard: 600V/20A
- IXYS** (United States)
Item: Fast recovery diode
Standard: 600V/30A
- NIPPON CHEMI-CON**
Item: Electrolytic capacitor
Standard: 315V/1000
- VAC** (Germany)
Item: Current sensor
Standard: VAC4646X400
- LEM** (Germany)
Item: Leakage current sensor
Standard: CTSR 0.3-P
- OMRON** (Japan)
Item: Relay
Standard: G8P-1A4P
- ATMEL** (United States)
Item: Main controller
Standard: ATmega64A

Spare parts



String-Transformerless

ASP-1.5/2/2.5/3KTLD



Features



Flexible design

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



Efficient conversion

Transformerless, max. efficiency is up to 98%;
Euro. efficiency is up to 97.5%
Total current THD <2%
Wide DC voltage input range, max. is up to 580V



Grid friendly

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

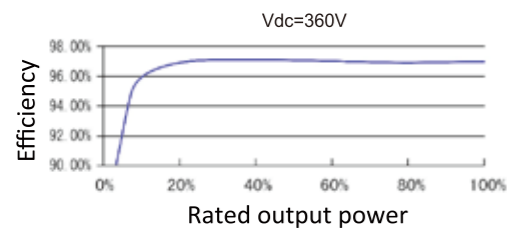


Excellent qualities

CQC Golden Sun Certification, TUV Certification, SAA Certification, CE Certification



Efficiency Curve



Technical Data

Input	1.5KTLD	2KTLD	2.5KTLD	3KTLD	System data	1.5KTLD	2KTLD	2.5KTLD	3KTLD
Max. DC input power	1950W	2600W	3250W	3900W	Max. efficiency	97.9%	97.9%	98%	98%
Max. DC input voltage	580V				Euro. efficiency	97.4%	97.4%	97.5%	97.5%
Max. DC input current	15A				Humidity range	0-95% non-condensing			
MPPT voltage range	80~550V				Cooling type	Air cooling			
Recommended MPP operating voltage	360V				Temperature range	-25~+60 C			
No. of MPPT	1				Power consumption at night	< 1W			
Max. no. of strings per MPPT	1				Max. working altitude	2000m			
					Display	Two line LCD/Two LEDs/One voice operated switch			
					Communication interface	RS485/GPRS(optional)/Wifi(optional)			
					Mechanical data				
Rated output power	1500W	2000W	2500W	3000W	Dimensions (WxHxD)	408x310x160mm			
Max. output power	1.65KVA	2.2KVA	2.75KVA	3.3KVA	Weight	12Kg			
Max. output current	8.5A	11.2A	13A	15A	Protection class	IP65			
Rated grid voltage	230V				Standard				
Grid voltage range	160~270Vac (adjustable)				Grid-connected standard	NB/T32004-2013; GB/T19964-2012			
Rated grid frequency	50Hz/60Hz				Safety standard	NB/T32004-2013; IEC 62109-1/2			
Grid frequency range	45~55Hz/55~65Hz				Electromagnetic compatibility	IEC 61000-6-2/4			
THD	< 2% (Under the rated power)								
Power factor	> 0.99 (Under the rated power)								
DC current injection	< 0.5% (Under the rated power)								

ASP-4/5/6KTLD



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 97.5%
Total current THD <2%



Grid friendly

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

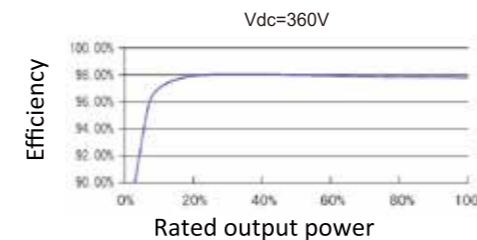


Excellent qualities

CQC Golden Sun Certification, TUV Certification, SAA Certification, CE Certification



Efficiency Curve



Technical Data

Input	4KTLD	5KTLD	6KTLD	System data	4KTLD	5KTLD	6KTLD
Max. DC input power	5200W	6500W	7200W	Max. efficiency	98.1%		
Max. DC input voltage	580V			Euro. efficiency	97.5%		
Max. DC input current	2X13A			Humidity range	0-95% non-condensing		
MPPT voltage range	80~550V			Cooling type	Air cooling		
Recommended MPP operating voltage	360V			Temperature range	-25~+60 C		
No. of MPPT	2			Power consumption at night	< 1W		
Max. no. of strings per MPPT	1			Max. working altitude	2000m		
				Display	Two line LCD/Two LEDs/One voice operated switch		
				Communication interface	RS485/GPRS(optional)/Wifi(optional)		
				Mechanical data			
Rated output power	4000W	5000W	6000W	Dimensions (WxHxD)	377X430X180mm		
Max. output power	4.4KVA	5.5KVA	6KVA	Weight	14Kg		
Max. output current	20A	25A	27A	Protection class	IP65		
Rated grid voltage	230V			Standard			
Grid voltage range	160~270Vac (adjustable)			Grid-connected standard	NB/T32004-2013; GB/T19964-2012		
Rated grid frequency	50Hz/60Hz			Safety standard	NB/T32004-2013; IEC 62109-1/2		
Grid frequency range	45~55Hz/55~65Hz			Electromagnetic compatibility	IEC 61000-6-2/4		
THD	< 2% (Under the rated power)						
Power factor	> 0.99 (Under the rated power)						
DC current injection	< 0.5% (Under the rated power)						

String-Transformerless

ASP-7/8KTLD



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 97.5%
Total current THD <2%



Grid friendly

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

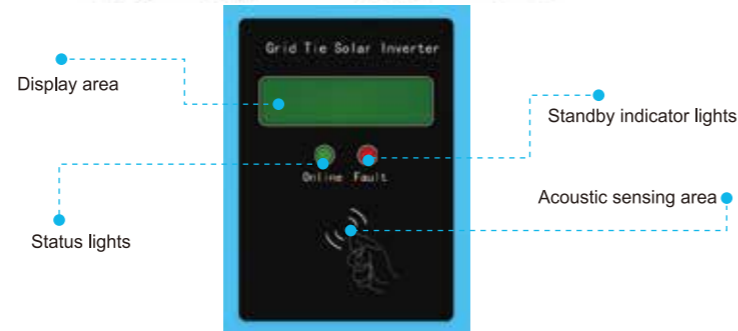
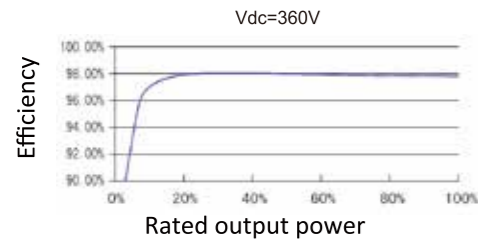


Excellent qualities

CQC Golden Sun Certification, TUV Certification, SAA Certification, CE Certification



Efficiency Curve



Technical Data

Input	7KTLD	8KTLD	System data	7KTLD	8KTLD
Max. DC input power	8000W	9200W	Max. efficiency		98.1%
Max. DC input voltage		580V	Euro. efficiency		97.6%
Max. DC input current		22/11A	Humidity range	0-95%	non-condensing
MPPT voltage range		80~550V	Cooling type		Air cooling
Recommended MPP operating voltage		360V	Temperature range		-25~+60 °C
No. of MPPT		2	Power consumption at night		< 1W
Max. no. of strings per MPPT		2/1	Max. working altitude		2000m
			Display	Two line LCD/Two LEDs/ One voice operated switch	
			Communication interface	RS485/GPRS(optional)/Wifi(optional)	
			Mechanical data		
			Dimensions (WxHxD)	377X430X220mm	
			Weight	18Kg	
			Protection class	IP65	
			Standard		
			Grid-connected standard	NB/T32004-2013; GB/T19964-2012	
			Safety standard	NB/T32004-2013; IEC 62109-1/2	
			Electromagnetic compatibility	IEC 61000-6-2/4	
Output					
Rated output power	7000W	8000W			
Max. output power	7.7KVA	8.8KVA			
Max. output current	33A	36A			
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)				
DC current injection	< 0.5% (Under the rated power)				

TLC series



ASP-8/10/12KTLC



ASP-15/17/20KTLC



ASP-22/25/30/33/40KTLC



ASP-50/60KTLC

Key components



Multi-Contact (Switzerland)
Item: PV cable connector
Standard: MC4



Littelfuse (United States)
Item: AC side fuse
Standard: 250V/30A



FAIRCHILD (United States)
Item: Fast recovery diode
Fast recovery diode
Power IGBT tube
Standard: RHRG30120
RHRG75120
18N120BND



Infineon (Germany)
Item: Power IGBT tube
Standard: IKW40T120



SEMİKRON (Germany)
Item: Tri-level module
Standard: SK75



Nichicon (Japan)
Item: Electrolytic capacitor
Standard: 500V/390µF



VAC (Germany)
Item: Current sensor
Standard: VAC4646X400



Tyco Electronics (United States)
Item: Relay
Standard: PCFN-112H2MG



TI (United States)
Item: Main controller
Standard: TMS320F2812



ALTERA (United States)
Item: Main controller
Standard: EPM570T100C5



Freescale (United States)
Item: Main controller
Standard: MC56F8323

Spare parts



PV-KBT4
MC4



PV-KST4
MC4



sealing washer

String-Transformerless

ASP-8/10/12KTLC



Features



Flexible design

Multi-communication interface: RS485, GPRS(optional), Wifi (optional)
Convection without fan
DC breaker, easy to maintain and safe to use
Digital DSP control technology



Efficient conversion

Transformerless, max. efficiency is up to 98.5%;
Euro. efficiency is up to 98%
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

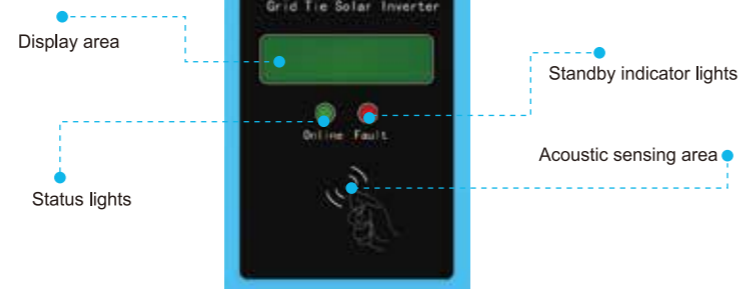
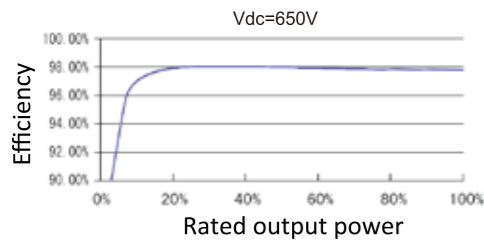


Excellent qualities

CQC Golden Sun Certification, TUV Certification, SAA Certification, CE Certification



Efficiency Curve



Technical Data

Input	8KTLC	10KTLC	12KTLC
Max. DC input power	10400W	13000W	15600W
Max. DC input voltage	1000V		
Max. DC input current	11/11A		22/11A
MPPT voltage range	250~950V		
Recommended MPP operating voltage	650V		
No. of MPPT	2		
Max. no. of strings per MPPT	1		2/1
Output	8KTLC	10KTLC	12KTLC
Rated output power	8000W	10000W	12000W
Max. output power	8.8KVA	11KVA	13.2KVA
Max. output current	13A	16A	19.2A
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)/0.8 leading ~ 0.8 lagging		
DC current injection	< 0.5% (Under the rated power)		

System data	8KTLC	10KTLC	12KTLC
Max. efficiency		98.5%	
Euro. efficiency		98%	
Humidity range	0-95% non-condensing		
Cooling type	Air cooling		
Temperature range	-25~+60 C		
Power consumption at night	< 1W		
Max. working altitude	4000m(Operation with derating above 2000m)		
Display	Two line LCD/Two LEDs/One voice operated switch		
Communication interface	RS485/GPRS (optional)/Wifi(optional)		
Mechanical data	8KTLC	10KTLC	12KTLC
Dimensions (WxHxD)	517X510X191mm		
Weight	26Kg		
Protection class	IP65		
Standard	8KTLC	10KTLC	12KTLC
Grid-connected standard	NB/T32004-2013; GB/T19964-2012		
Safety standard	NB/T32004-2013; IEC 62109-1/2		
Electromagnetic compatibility	IEC 61000-6-2/4		

ASP-15/17/20KTLC



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



Efficient conversion

Transformerless, max. efficiency is up to 96%
Euro. efficiency is up to 98.1%
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

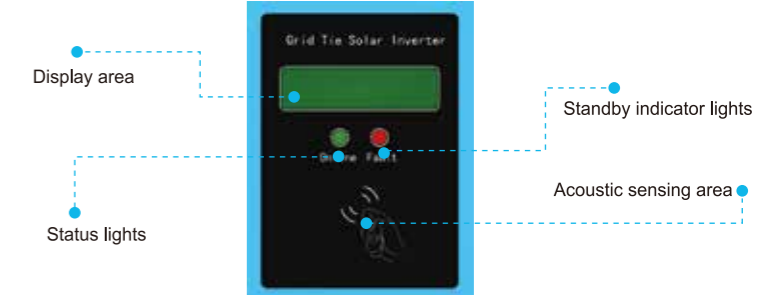
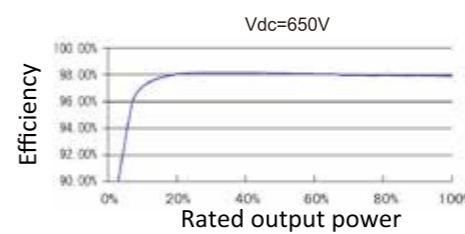


Excellent qualities

CQC Golden Sun Certification, TUV Certification, SAA Certification, CE Certification



Efficiency Curve



Technical Data

Input	15KTLC	17KTLC	20KTLC
Max. DC input power	18000W	20400W	24000W
Max. DC input voltage	1000V		
Max. DC input current	22/11A		2X28A
MPPT voltage range	250~950V		
Recommended MPP operating voltage	650V		
No. of MPPT	2		
Max. no. of strings per MPPT	2/1		3
Output	15KTLC	17KTLC	20KTLC
Rated output power	15000W	17000W	20000W
Max. output power	16.5KVA	18.7KVA	22KVA
Max. output current	24A	28A	33A
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)/0.8 leading ~ 0.8 lagging		
DC current injection	< 0.5% (Under the rated power)		

System data	15KTLC	17KTLC	20KTLC
Max. efficiency		98.5%	
Euro. efficiency		98%	
Humidity range	0-95% non-condensing		
Cooling type	Intelligent forced air cooling		
Temperature range	-25~+60 C		
Power consumption at night	< 1W		
Max. working altitude	4000m(Operation with derating above 2000m)		
Display	Two line LCD/Two LEDs/One voice operated switch		
Communication interface	RS485/GPRS (optional)/Wifi(optional)		
Mechanical data	15KTLC	17KTLC	20KTLC
Dimensions (WxHxD)	517X510X191mm	478X752X208mm	
Weight	26Kg	40Kg	40Kg
Protection class	IP65		
Standard	15KTLC	17KTLC	20KTLC
Grid-connected standard	NB/T32004-2013; GB/T19964-2012		
Safety standard	NB/T32004-2013; IEC 62109-1/2		
Electromagnetic compatibility	IEC 61000-6-2/4		

String-Transformerless

ASP-22/25/30/33/40KTLC

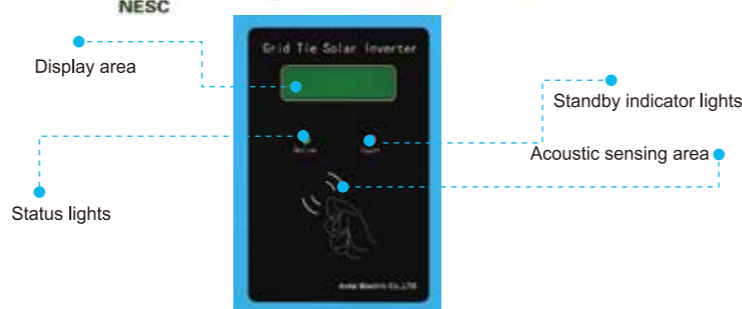
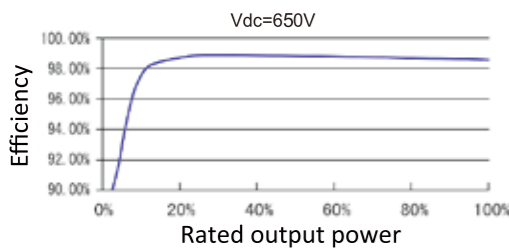


Features

- 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 98.7%;
Euro. efficiency is up to 98.2%
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

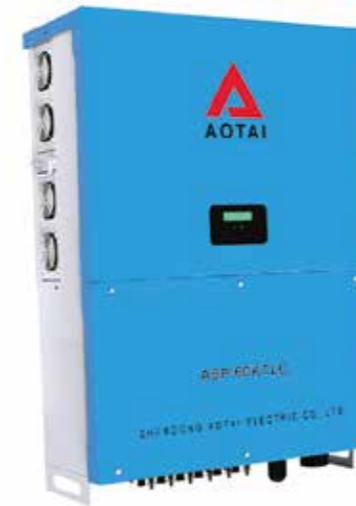


Technical Data

Input	22KTLC	25KTLC	30KTLC	33KTLC	40KTLC
Max. DC input power	26400W	30000W	36000W	39600W	44000W
Max. DC input voltage	1000V				
Max. DC input current	2X28A	2X28A	2X28A	2X35A	2X35A
MPPT voltage range	250~950V		280~950V		
Recommended MPP operating voltage	650V				
No. of MPPT	2				
Max. no. of strings per MPPT	3		4		
Output					
Rated output power	22000W	25000W	30000W	33000W	40000W
Max. output power	24.2KVA	27.5KVA	33KVA	36.3KVA	44KVA
Max. output current	37A	42A	50A	52.5A	63.5A
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)/0.8 leading ~ 0.8 lagging				
DC current injection	< 0.5% (Under the rated power)				

System data	22KTLC	25KTLC	30KTLC	33KTLC	40KTLC
Max. efficiency	98.6%	98.5%	98.7%	98.7%	98.7%
Euro. efficiency	98.1%	98%	98.2%	98%	98%
Humidity range	0-95% non-condensing				
Cooling type	Intelligent forced air cooling				
Temperature range	-25~+60 C				
Power consumption at night	< 1W				
Max. working altitude	4000m(Operation with derating above 2000m)				
Display	Two line LCD/Two LEDs/ One voice operated switch				
Communication interface	RS485/GPRS(optional)/Wifi(optional)				
Mechanical data					
Dimensions (WxHxD)	478X752X208mm		620X870X260mm		
Weight	40Kg	43Kg	43Kg	70Kg	70Kg
Protection class	IP65				
Standard					
Grid-connected standard	NB/T32004-2013; GB/T19964-2012				
Safety standard	NB/T32004-2013; IEC 62109-1/2				
Electromagnetic compatibility	IEC 61000-6-2/4				

ASP-50/60KTLC

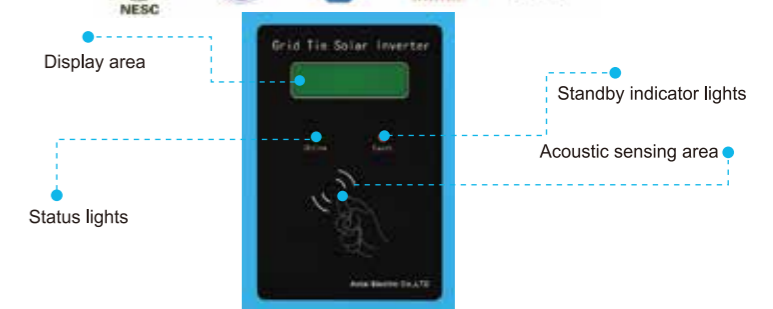
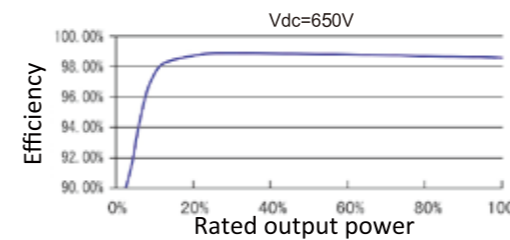


Features

- 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 98.5%
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

Input	50KTLC	60KTLC
Max. DC input power	65000W	72000W
Max. DC input voltage	1000V	
Max. DC input current	120A(4X30A)	
MPPT voltage range	300~950V	
Recommended MPP operating voltage	650V	
No. of MPPT	4	
Max. no. of strings per MPPT	3	
Output		
Rated output power	50000W	60000W
Max. output power	55KVA	66KVA
Max. output current	80A	96A
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	50KTLC	60KTLC
Max. efficiency	98.7%	98.9%
Euro. efficiency	98.3%	98.5%
Humidity range	0-95% non-condensing	
Cooling type	Intelligent forced air cooling	
Temperature range	-25~+60 C	
Power consumption at night	< 1W	
Max. working altitude	4000m(Operation with derating above 3000m)	
Display	Two line LCD/Two LEDs/ One voice operated switch	
Communication interface	RS485/GPRS (optional)/Wifi(optional)	
Mechanical data		
Dimensions (WxHxD)	670X960X300mm	
Weight	75Kg	
Protection class	IP65	
Standard		
Grid-connected standard	NB/T32004-2013; GB/T19964-2012	
Safety standard	NB/T32004-2013; IEC 62109-1/2	
Electromagnetic compatibility	IEC 61000-6-2/4	

Central-PF Transformer Isolation

Power station series



ASP-30/50K

ASP-100/250K

ASP-500/630K

ASP-500/630KTL

Key components

SEMIKRON
innovation+service
SEMIKRON (Germany)
Item: IGBT
Standard: SEMIX604GB12V4S

ABB
ABB (Switzerland)
Item: DC breaker
AC breaker
AC contactor
Standard: T6H800TMA800 4P
T7H1600PR231/P-LSI R1600 FF3P
AF1350-30-11

SCHAFFNER
energy efficiency and reliability
SCHAFFNER (Switzerland)
Item: DC EMC
AC EMC
Standard: FN2200B-1500-99
FN3359PV-1600-99

OBO
BETTERMANN
OBO (Germany)
Item: DC SPD (surge protection device)
AC SPD (surge protection device)
Standard: V20-C/3-PH1000
V10-C/3

COOPER
Bussmann
BUSSMANN (United States)
Item: DC side fuse
AC side fuse
Standard: 170M5148
170M6018

EPCOS
EPCOS (Germany)
Item: Three phase filter capacitor
Standard: B32304A4302A080

SUNON
SUNON (Taiwan, China)
Item: Fan
Standard: PSD24H0AZBX-A

CG-Elec
创格电子
Foshan Shunde
Chuang Ge Electric (China)
Item: Bus capacitor
Standard: MKP-LS

Spare parts



AC centrifugal blowers
dual inlet Ø 133 mm
Uses a new type impeller made of plastic or high-quality aluminum alloy, the former to the blade.
Impeller and external rotor motor constitute a whole, as the impeller wheel of the drive motor is air cooled efficiently.
Scroll plastic, wind-round use of galvanized steel plates.
Motor protection class: IP42

ASP-30/50K



Features



Flexible design

Modular design, open the front door to maintain, easy installation and maintenance
Multi-language dynamic graphics LCD, can maintain scene in time when in fault



Efficient conversion

Power frequency transformer, max. efficiency is 95.6%/96.3%
High efficiency MPPT control strategy, enhance the energy output
Nightly intelligent hibernation technology, reduce loss during night

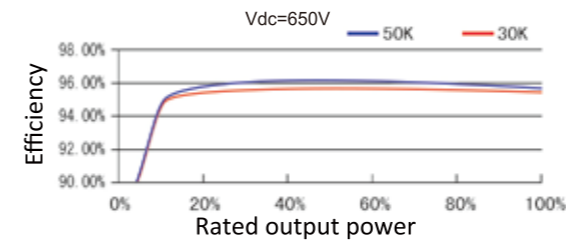


Grid friendly

Optional LVRT/ZVRT function to cope with various grid conditions
AGC/AVC function, realize active power adjustable range from 0~100%
Power factor is from 0.9 leading to 0.9 lagging
Nightly SVG function, respond to grid dispatching instruction all time



Efficiency Curve



Technical Data

Input	30K	50K
Max. DC input power	33KW	55KW
Max. DC input voltage		1000V
Max. DC input current	73A	122A
MPPT voltage range		450~820V
Recommended MPP operating voltage		650V
No. of MPPT		1
Output		
Rated output power	30KW	50KW
Max. output power	33KVA	55KVA
Max. output current	50A	83A
Rated grid voltage		400V
Grid voltage range		310~450Vac
Rated grid frequency		50Hz/60Hz
Grid frequency range		47~51.5Hz/57~61.5Hz
THD		< 3% (Under the rated power)
Power factor		> 0.99 (Under the rated power)
DC current injection		< 0.5% (Under the rated power)

System data	30K	50K
Max. efficiency	95.6% (Power frequency transformer)	96.3% (Power frequency transformer)
Euro. efficiency	95% (Power frequency transformer)	95.9% (Power frequency transformer)
Humidity range	0-95% non-condensing	
Cooling type	Intelligent forced air cooling	
Temperature range	-25~+55 C	
Power consumption at night	< 30W	
Max. working altitude	6000m(Operation with derating above 3000m)	
Display	Touch screen	
Communication interface	RS485/Ethernet	

Mechanical data		
Dimensions (WxHxD)	800x1760x600mm	
Weight	560Kg	640Kg
Protection class	IP20	

Standard		
Grid-connected standard	NB/T32004-2013; GB/T19964-2012	
Safety standard	NB/T32004-2013; IEC 62109-1/2	
Electromagnetic compatibility	IEC 61000-6-2/4	

Central-PF Transformer Isolation

ASP-100/250K



Features



Flexible design

Modular design, open the front door to maintain, easy installation and maintenance
Multi-language dynamic graphics LCD, can maintain scene in time when in fault



Efficient conversion

Power frequency transformer, max. efficiency is 97.3%
High efficiency MPPT control strategy, enhance the energy output
Nightly intelligent hibernation technology, reduce loss during night
Wind channel design, low power dissipation, high heat dissipation



Grid friendly

LVRT/ZVRT function to cope with various grid conditions
Nightly SVG function, respond to grid dispatching instruction all time
AGC/AVC function, realize active power adjustable range from 0~100%
Adjustable reactive power factor from 0.9 leading to 0.9 lagging

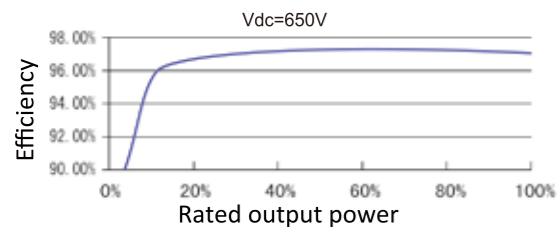


More advantages

Perfect protection and failure warning system, safe and reliable
Dual power supply method, improve system reliability
High efficient PWM modulation arithmetic, reduce switching loss



Efficiency Curve



Technical Data

Input	100K	250K
Max. DC input power	110KW	275KW
Max. DC input voltage	1000V	
Max. DC input current	244A	550A
MPPT voltage range	450~820V	500~850V
Recommended MPP operating voltage	650V	
No. of MPPT	1	
Output		
Rated output power	100KW	250KW
Max. output power	110KVA	275KVA
Max. output current	166A	416A
Rated grid voltage	400V	
Grid voltage range	310~450Vac	
Rated grid frequency	50Hz/60Hz	
Grid frequency range	47~51.5Hz/57~61.5Hz	
THD	< 2% (Under the rated power)	
Power factor	>0.99 (Under the rated power) 0.9 leading ~ 0.9 lagging	
DC current injection	< 0.5% (Under the rated power)	

System data	100K	250K
Max. efficiency	97.3%(Power frequency transformer)	
Euro. efficiency	96.7%(Power frequency transformer)	
Humidity range	0-95% non-condensing	
Cooling type	Intelligent forced air cooling	
Temperature range	-25~+55 C	
Power consumption at night	< 100W	
Max. working altitude	6000m(Operation with derating above 3000m)	
Display	Touch screen	
Communication interface	RS485/Ethernet	
Mechanical data		
Dimensions (WxHxD)	1000x1960x800mm	2000x2160x800mm
Weight	850Kg	1700Kg
Protection class	IP20	
Standard		
Grid-connected standard	NB/T32004-2013; GB/T19964-2012	
Safety standard	NB/T32004-2013; IEC 62109-1/2	
Electromagnetic compatibility	IEC 61000-6-2/4	

ASP-500/630K



Features



Flexible design

Independent unit modular design, unit can operate individually, improve whole machine availability
Imported IGBT components, driver is imported from Germany, more stable and reliable
Film capacitors increase the system life span



Efficient conversion

Max. efficiency is 97.4%
Min. loss PWM modulation arithmetic, reduce switching loss
High efficient reactor, over capacity design, reduce output loss
Optimized copper bar structure design, reduce cable loss



Grid friendly

Pass new standard NB/T32004-2013 test
LVRT/ZVRT function to cope with various grid conditions
Nightly SVG function, respond to grid dispatching instruction all time
AGC/AVC function, realize active power adjustable range from 0~100%
Power factor from 0.9 leading to 0.9 lagging

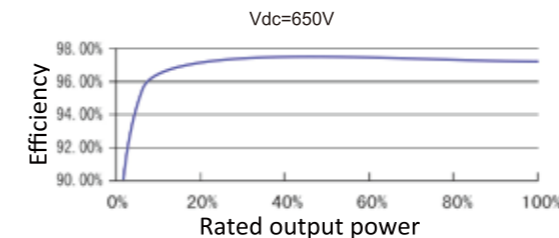


More advantages

Open the front door to maintain, easy installation and maintenance
Dual power supply method, improve system reliability
Nightly intelligent hibernation technology, reduce loss during night
CQC Golden Sun Certification, CE Certification, State Grid Certification



Efficiency Curve



Technical Data

Input	500K	630K
Max. DC input power	550KW	705KW
Max. DC input voltage	1000V	
Max. DC input current	1100A	1356A
MPPT voltage range	500~850V	520~850V
Recommended MPP operating voltage	650V	
No. of MPPT	1	
Output		
Rated output power	500KW	630KW
Max. output power	550KVA	693KVA
Max. output current	830A	1050A
Rated grid voltage	400V	
Grid voltage range	310~450Vac	
Rated grid frequency	50Hz/60Hz	
Grid frequency range	47~51.5Hz/57~61.5Hz	
THD	< 2% (Under the rated power)	
Power factor	0.9 (leading)~0.9 (lagging)	
DC current injection	< 0.5% (Under the rated power)	

System data	500K	630K
Max. efficiency	97.4%(Power frequency transformer)	
Euro. efficiency	96.8%(Power frequency transformer)	
Humidity range	0-95% non-condensing	
Cooling type	Intelligent forced air cooling	
Temperature range	-25~+55 C	
Power consumption at night	< 100W	
Max. working altitude	6000m(Operation with derating above 3000m)	
Display	Touch screen	
Communication interface	RS485/Ethernet	
Mechanical data		
Dimensions (WxHxD)	2600x1960x1100mm	2800x1960x1100mm
Weight	3400Kg	3450Kg
Protection class	IP20	
Standard		
Grid-connected standard	NB/T32004-2013; GB/T19964-2012	
Safety standard	NB/T32004-2013; IEC 62109-1/2	
Electromagnetic compatibility	IEC 61000-6-2/4	

Central-Transformerless

ASP-500KTL

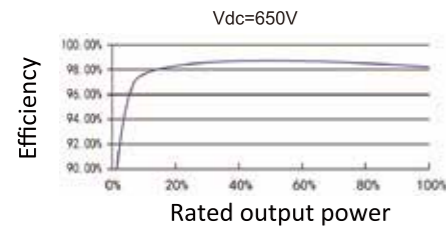


Features

- Flexible design**
Independent unit modular design, unit can operate individually, improve whole machine availability
Imported IGBT components, driver is imported from Germany, more stable and reliable
Film capacitors increase the system life span
- Efficient conversion**
Max. efficiency is 98.8%
Min. loss PWM modulation arithmetic, reduce switching loss
High efficient reactor, over capacity design, reduce output loss
Optimized copper bar structure design, reduce cable loss
- Grid friendly**
Pass new standard NB/T32004-2013 test
LVRT/ZVRT function to cope with various grid conditions
Nightly SVG function, respond to grid dispatching instruction all time
AGC/AVC function, realize active power adjustable range from 0~100%
Power factor from 0.9 leading to 0.9 lagging
- More advantages**
Open the front door to maintain, easy installation and maintenance
Dual power supply method, improve system reliability
Nightly intelligent hibernation technology, reduce loss
China Energy Efficiency Rate Certification, CQC Golden Sun Certification, CE Certification, State Grid Certification



Efficiency Curve



Technical Data

Input	500KTL
Max. DC input power	550KW
Max. DC input voltage	1000V
Max. DC input current	1100A
MPPT voltage range	500~850V
Recommended MPP operating voltage	650V
No. of MPPT	1
Output	500KTL
Rated output power	500KW
Max. output power	550KVA
Max. output current	1000A
Rated grid voltage	315V
Grid voltage range	250~362Vac
Rated grid frequency	50Hz/60Hz
Grid frequency range	47~51.5Hz/57~61.5Hz
THD	< 2% (Under the rated power)
Power factor	>0.99(Under the rated power) 0.9 (leading)~0.9(lagging)
DC current injection	< 0.5% (Under the rated power)

System data	500KTL
Max. efficiency	98.8%
Euro. efficiency	98.3%
Humidity range	0-95% non-condensing
Cooling type	Intelligent forced air cooling
Temperature range	-25~+55℃
Power consumption at night	< 100W
Max. working altitude	6000m(Operation with derating above 3000m)
Display	Touch screen
Communication interface	RS485/ Ethernet
Mechanical data	500KTL
Dimensions (WxHxD)	1000x1960x800mm
Weight	1000Kg
Protection class	IP20
Standard	500KTL
Grid-connected standard	NB/T32004-2013; GB/T19964-2012
Safety standard	NB/T32004-2013; IEC 62109-1/2
Electromagnetic compatibility	IEC 61000-6-2/4

ASP-630KTL

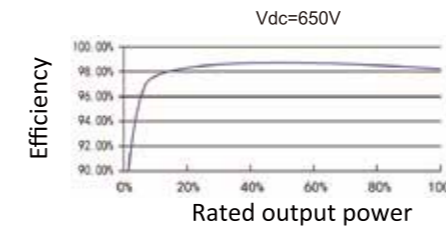


Features

- Flexible design**
Independent unit modular design, unit can operate individually, improve whole machine availability
Imported IGBT components, driver is imported from Germany, more stable and reliable
Film capacitors increase the system life span
- Efficient conversion**
Max. efficiency is 99%
Min. loss PWM modulation arithmetic, reduce switching loss
High efficient reactor, over capacity design, reduce output loss
Optimized copper bar structure design, reduce cable loss
- Grid friendly**
Pass new standard NB/T32004-2013 test
LVRT/ZVRT function to cope with various grid conditions
Nightly SVG function, respond to grid dispatching instruction all time
AGC/AVC function, realize active power adjustable range from 0~100%
Power factor from 0.9 leading to 0.9 lagging
- More advantages**
Open the front door to maintain, easy installation and maintenance
Dual power supply method, improve system reliability
Nightly intelligent hibernation technology, reduce loss
CQC Golden Sun Certification, CE Certification, State Grid Certification



Efficiency Curve



Technical Data

Input	630KTL
Max. DC input power	705KW
Max. DC input voltage	1000V
Max. DC input current	1356A
MPPT voltage range	520~850V
Recommended MPP operating voltage	650V
No. of MPPT	1
Output	630KTL
Rated output power	630KW
Max. output power	693KVA
Max. output current	1111A
Rated grid voltage	360V
Grid voltage range	288~414Vac
Rated grid frequency	50Hz/60Hz
Grid frequency range	47~51.5Hz/57~61.5Hz
THD	< 2% (Under the rated power)
Power factor	>0.99(Under the rated power) 0.9 (leading)~0.9(lagging)
DC current injection	< 0.5% (Under the rated power)





System data	630KTL
Max. efficiency	99%
Euro. efficiency	98.7%
Humidity range	0-95% non-condensing
Cooling type	Intelligent forced air cooling
Temperature range	-25~+60℃
Power consumption at night	< 100W
Max. working altitude	6000m(Operation with derating above 3000m)
Display	Touch screen
Communication interface	RS485/Ethernet
Mechanical data	630KTL
Dimensions (WxHxD)	1000x1960x800mm
Weight	1000Kg
Protection class	IP20
Standard	630KTL
Grid-connected standard	NB/T32004-2013; GB/T19964-2012
Safety standard	NB/T32004-2013; IEC 62109-1/2
Electromagnetic compatibility	IEC 61000-6-2/4

Central-PF Transformer Inverter Container-type

ANBF-1000/1260K



Features

- 
Turnkey solution
 Integrated inverter, power distribution box, medium voltage transformer, ring main unit, monitoring system, fire extinguishing system, environment monitoring function modules
 Integrated large AC cables, reduce cable loss, improve system efficiency
 Realize real-time data collection and monitoring of combining, inversion, power distribution, etc.
- 
Stronger environment adaptability
 IP54 protection class, auto temperature and humidity control, good heat insulation effect
 Standard integrative protection design, anti-wind, anti-sand, anti-decay
- 
Container design, easy for transportation
 Can adjust parameters according to grid requirement
 ZVRT function, AGC/AVC function, nightly SVG function, PID prevent and repair function
- 
Recycle
 Container enclosure is recyclable, no concrete recycle problem

Technical Data

General	ANBF-1000K	ANBF-1260K
Dimensions (WxHxD)	3820x2470x2700mm(Flat room) /3920x2470x2800mm(Container)	
Weight	8t	
Protection class	IP54	
External auxiliary power supply voltage (optional)	230/400V	
Temperature range	-25~+55℃	
Max. working altitude	6000m(Operation with derating above 3000m)	
Cooling type	Intelligent forced air cooling	
Relative humidity	0-95% non-condensing	
Communication interface	RS485/Ethernet	

Central-Transformerless Inverter Container-type

ANBF-1000/1260KTL



Features

- 
Highly integration
 Megawatt equipment, 7 square meter floor space
 Can use forklift to transfer and install, more flexible
 Integrated inverter, power distribution box, monitoring system, fire alarm function modules
- 
High protective property
 No wind passage indoor, top ventilate, low wind resistance
 Wind channel design, ensure shortest heat dissipation passage
 S shape window-shades, removable strainer, three-level dust-proof design, key components are totally closed
 Super-thick high efficient heat preservation and insulation layer, suit for extreme severe weather
- 
Easy maintenance
 Removable protective screening, convenient to change and clean
 All sides open-the-door design, easy to install and maintain
 Built-in equipments are convenient for overall change
- 
Recycle
 Container enclosure is recyclable, no concrete recycle problem

Technical Data

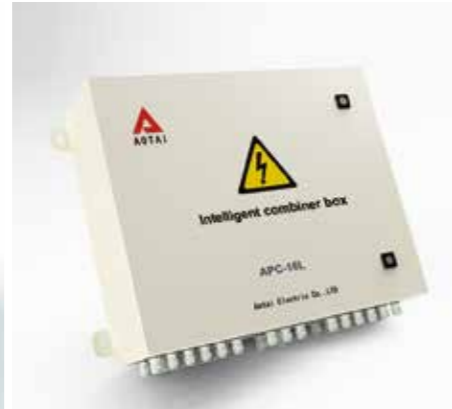
General	ANBF-1000KTL	ANBF-1260KTL
Dimensions (WxHxD)	3440x2470x1130mm(Flat room) /3040x2260x1230mm(Container)	
Weight	4t	
Protection class	IP54	
External auxiliary power supply voltage (optional)	230/400V	
Temperature range	-25~+55℃	
Max. working altitude	6000m(Operation with derating above 3000m)	
Cooling type	Intelligent forced air cooling	
Relative humidity	0-95% non-condensing	
Communication interface	RS485/Ethernet	

Accessories / Monitoring

Accessories



APCA-4/6/8/10L



APC-8/10/12/16L



APDA AC Distribution Cabinet



AEM-1/2m

Monitoring



Monitoring – data collection



ATSolar APP



ATSolarInfo PV power station monitoring system

Accessories - AC Combiner Box

APCA-4/6/8/10L



Features



Simplify system wiring



Meet the needs of outdoor installation and operation requirements, easy to maintain



Max. input voltage is 480V



Custom-made optional items according to customer needs



Can monitor PV inverter output current

Product introduction

For large-scale PV grid-connected power generation system, in order to reduce connection cable between inverter and grid, easy for maintenance and improve reliability, normally add AC combiner box between inverter and grid. Aotai AC combiner box is designed for this purpose, it can work with Aotai inverter to combine complete PV

power generation system. With AC combiner box, user can connect some inverters with same standard into AC combiner box in parallel according to inverter output AC voltage range, passing through lightning protection device and circuit breaker, then output, this makes convenient for later combiner device to connect in.

Technical Data

Basic	4L	6L	8L	10L
Max. inverter input voltage			480V	
Max. inverter parallel inputs	4	6	8	10
Rated current per input (replaceable)			63A	
AC input terminal			MG40W-25	
AC output terminal			MG75W-60	
Ground/communication terminal			MG20W-14	
Protection class			IP65	
Dimensions (WxHxD)			700x900x250mm	
Weight	45Kg	45Kg	50Kg	50Kg

Standard configuration

AC circuit breaker	Yes
SPD	Yes

Optional

Output current monitor	Yes
SPD failure monitoring	Yes
Communication interface	RS485/Wireless

APC-8/10/12/16L



Features



Simplify system wiring



Meet the needs of outdoor installation and operation, easy to maintain



Wide DC voltage input range, max. input open circuit voltage is 1000V



PV dedicated DC fuse, PV dedicated high voltage lightning protections



Custom-made optional items according to customer needs



Can monitor PV module string current

Product introduction

For large-scale PV grid-connected power generation system, in order to reduce connection cable between inverter and PV modules, easy for maintenance and improve reliability, normally add DC combiner box between inverter and PV modules. Aotai PV array lightning protection combiner box is designed for this purpose, it can work with Aotai inverter to combine complete PV power generation system. With PV

combiner box, user can connect some PV modules with same standard into 1 PV module string in parallel according to inverter input DC voltage range, and connect some PV module string to PV array lightning protection combiner box, passing through lightning protections and circuit breaker, then output, this makes convenient for later inverter to connect in.

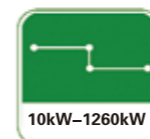
Technical Data

Basic	8L	10L	12L	16L
Max. PV array voltage			1000V	
Max. PV array parallel inputs	8	10	12	16
Rated fuse current (replaceable)			15A	
Allowable input current			Rated fuse current value/1.56	
DC input terminal			MG16W-10	
DC output terminal			MG16W-10	
Ground/communication terminal			MG20W-14	
Protection class			IP65	
Dimensions (WxHxD)			650x480x180mm	
Weight	23Kg	23Kg	25Kg	25 Kg
Standard configuration				
DC circuit breaker			Yes	
PV dedicated SPD			Yes	
Optional				
Current monitor for each string			Yes	
SPD failure monitoring			Yes	
Communication interface			RS485/Wireless	

APDA AC Distribution Cabinet



Features



Specs:10kW~1260kW



Simplify system wiring



Easy to operate and maintain



High reliability and safety



ABB breaker, high quality components like Phoenix and Shield



Real-time monitoring and display of current and voltage



RS485 communication, monitoring optional



Can be customized according to customers' requirement

Product introduction

The main function of AC power distribution cabinet is to supply grid-connected interface through power distribution. This cabinet is mainly composed of breaker, SPD, electricity meter, grid-connected interface and AC current and voltage meters, etc.

AEM-1/2m



Product Introduction

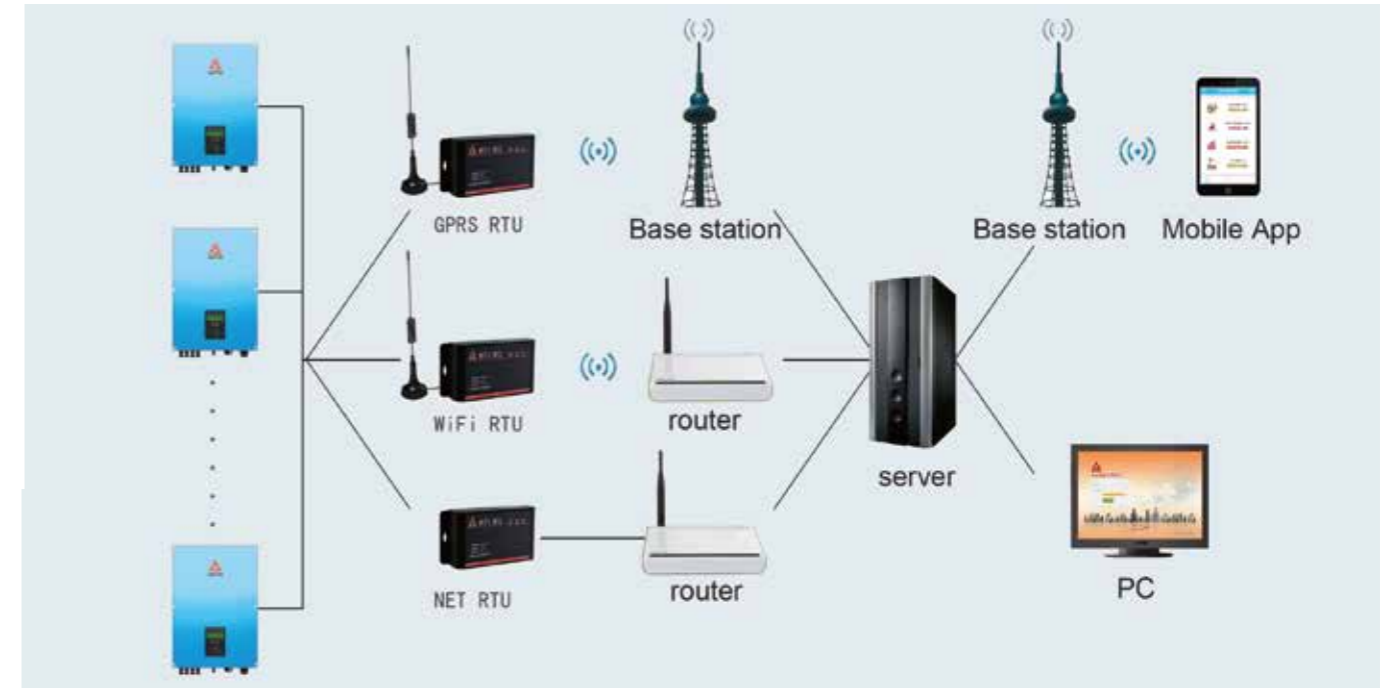
This device can do round-the-clock measurement of wind speed and direction, precipitation, air temperature and humidity, irradiation, atmospheric pressure, and other local meteorological parameters. Via matched data collection communication line, it can connect with

and transfer the gathered data to PC for data analysis and processing. Data recorder has functions of data acquisition, data memory, parameter setting, friendly software interface and standard communication.

Technical Data

Outdoor ambient temperature	AEM-1/2m	Wind direction	AEM-1/2m
Measuring range	-40~+80°C	Measuring range	160 orientation (360°)
Measuring accuracy	±0.1°C	Measuring accuracy	≤2%
Measuring sensitivity	0.1°C	Measuring sensitivity	2.5°
PV module temperature	AEM-1/2m	Solar radiation	AEM-1/2m
Measuring range	-40~+80°C	Spectral range	300-3000nm
Measuring accuracy	±0.1°C	Measuring range	0~2000W/m²
Measuring sensitivity	0.1°C	Measuring accuracy	≤3%
Wind speed	AEM-1/2m	Measuring sensitivity	1W/m²
Measuring range	0-60m/s	Sensitivity	7-14μV/(W·m-2)
Measuring accuracy	≤2%		
Measuring sensitivity	0.1m/s		

Distributed solar power station remote monitoring system



Features



Easy installation, various networking mode



Global remote monitoring, unattended operation, round the clock monitoring, powerful assistant of power station management



Configured remote parameters, easy to maintain



Auto data backup, ensure data safety



Support Modbus, CAN, RS485

Product Introduction

Distributed solar power station remote monitoring system is for unified management, monitoring, operation and maintenance, analysis of distributed solar power station. By internet of things like GPRS/WiFi/wired to real-time gather solar power station data, transfer data to cloud serve center for calculating and logical

processing. Provide mobile APP, internet for user checking; provide monitoring, operation and maintenance, energy efficiency improvement, safe operation for distributed solar power station owner and power user.

Technical Data

Language	Chinese, English
Browser	Internet Explorer version 6.0 and above, Firefox 3.0 and above, Google Chrome、opera
Data transmission interval	5 minutes
Data storage time	> 30 years
Report form	Daily report, weekly report, monthly report, yearly report
Display method	Display power station and equipment data by chart and tabular form
Power station data	Power station power, power station condition, yearly/monthly/daily power generation, sunlight, temperature, income, CO2 wavings
Power station statistical data	Yearly/monthly/daily power generation, yearly/monthly/daily per kilowatt power generation
Inverter data	AC/DC voltage, AC/DC current, AC/DC power, grid frequency, equipment status, machine temperature, power generation
Combiner box	DC voltage, DC current, SPD status

GPRS/Wifi/NET RUT GPRS/Wifi RUT-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

Communication	GPRS/Wifi/NET RUT	GPRS/Wifi RUT-USB	Other data	GPRS/Wifi/NET RUT	GPRS/Wifi RUT-USB
Inverter communication	RS485		Dimensions (WxHxD)	145x72x28mm	79x59x26mm
PC communication			Weight	390g	10g
Server	GPRS/ Wifi/ Ethernet	GPRS/ Wifi	Protection class	IP20	IP65(after installation)
Max. number of connections			Installation options	wall bracket, tabletop	On the inverter
RS485 terminal	32	1	language versions -software/manual		Chinese, English
Max. communication range					
RS485	1200m	0m			
Ethernet	-/-/ 100m	-			
Wireless (open field)	unlimited/ 20m/ -	unlimited/ 20m/ -			
power supply					
Power module	AC 220V to DC 12V				
Input voltage	DC12V	DC12V			
Power consumption	1W(avg); 3W(max);				
Environmental conditions					
Ambient temperature	-20~+60 C				
Humidity	0~95%,non-condensing				

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.



Scan by Wechat, download ATSolar APP (after scan, click right upper position, and open with website)

ATSolarInfo 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 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.

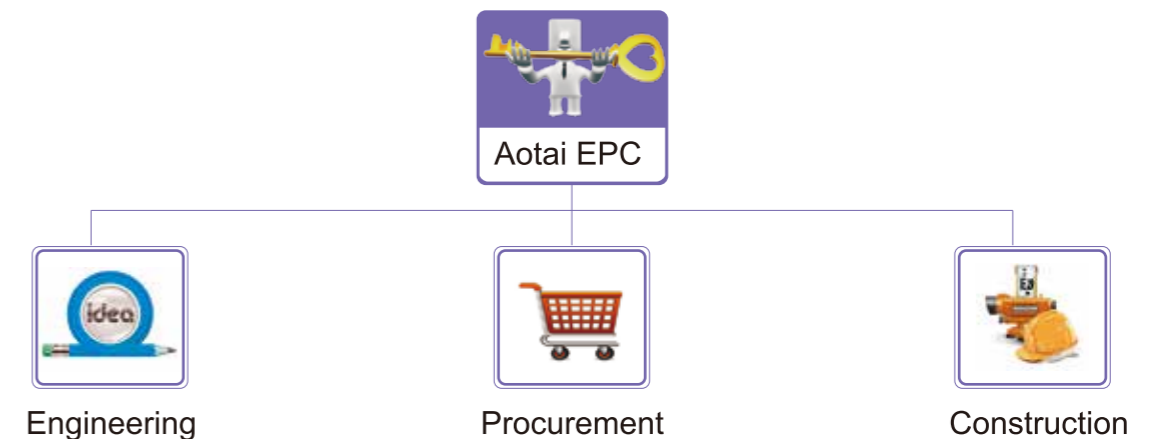
Login <http://aotaicloud.com/ATSolarInfo/>, to realize real-time monitoring and management for your power station.

EPC - Engineering Procurement Construction



AOTAI offer turnkey solutions to grid-connected and off-grid solar power systems. By offering good and professional long-term service in system design and construction, device

debugging, operation and maintenance, we help clients to get maximum gains from their investment.

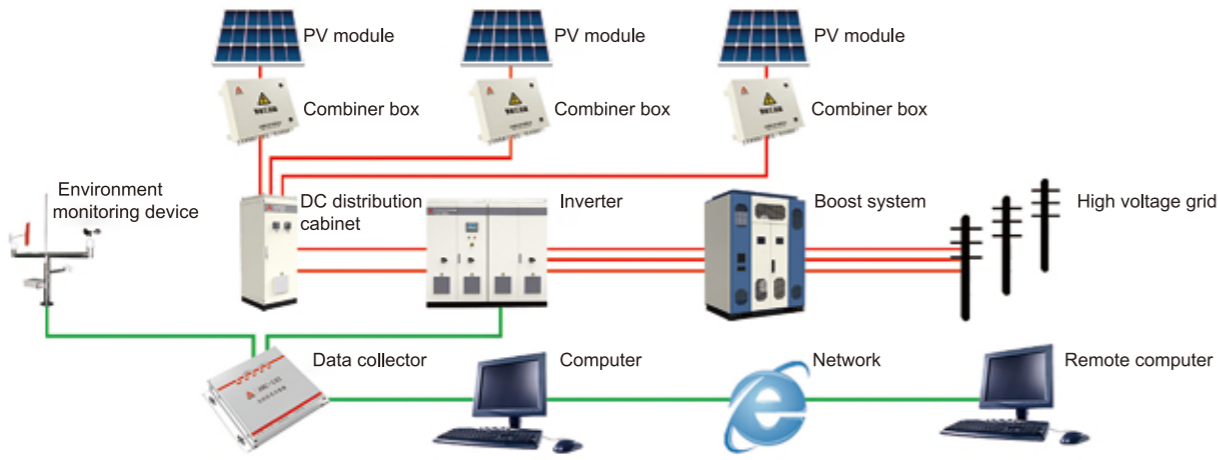


Engineering
Design high-efficient PV power system and offer feasibility analysis report according to customers' requirement and local conditions.

Procurement
Select high-quality PV panels, brackets, cables, AOTAI solar inverters.

Construction
Qualified and experienced professional engineering team strictly control construction process and provide good-quality projects.

EPC Aotai Advantages



PV grid-connected system

Core Technology

All electrical equipment in the solar power systems are designed and manufactured by us. Good system integrity and compatibility make AOTAI enjoy greater advantages

in system maintenance and upgrade. As the key part of PV systems, solar inverters are most important for stable and long-term operation of the system.

Good Management

Standardized construction makes sure of high-quality products and engineering process. We only cooperate with well-known manufacturers of PV panels, brackets, and cables in China.

Rich Experience

We are very experienced in applying for and getting approval of grid-connected power systems. This ensures smooth connection with grid and help to win maximum generating income.



ASP-500KTL for 65MW solar power station at Huaneng Golmud



ASP-500KTL for 10MW solar power station at Huadian, Xianggong Zhangqiu



ASP-40KTLC for 10MW solar power station at first stage of Huadian, Taierzhuang



ASP-500KTL for 40MW solar power station at Weishan Xuri



Our Projects



ASP-500KTL for 70MW ground solar power station at CECEP Dunhuang



ASP-500KTL for 40MW high-efficiency agriculture solar power station of Linyang Energy Group, Dezhou



ASP-500KTL for 10MW solar power station at Shanghai Power, Fengxian



ASP-500KTL for 30MW solar power station at Taohuayu, Laiwu



ANBF-1000KTL for 20MW solar power station at Jilin



ASP-500KTL for 50MW solar power station at Pingshan, Hebei

Our Projects



ASP-500KTL for 30MW project of Dahai Group



ASP-20KTLC&30KTLC for PV projects at High-speed service areas



ASP-500K, ASP-630K for 7.158MW solar power station at Linuo Group, Shandong



ANBF-1000K for 5.5MW solar power station at Longkou Shengda Glass Products Co., Ltd



ASP-10KTLC for 20KW distributed solar power station at Weishan Jail



ASP-50K for 1.5MW Gold Sun Campus Roof Top solar power station at Beijing



ASP-30KTLC, ASP-20KTLC for 5MW distributed solar power station at MCC Baosteel



ASP-30KTLC, ASP-20KTLC, ASP-10KTLC for 8.5MW poverty relief PV power projects at Heze

Our Projects



HF series for first 226.8KW grid-connected solar power station of Hanergy at Yumen



ASP-20KTLC for 320KW solar power station at Jicheng Electrical Park



ASP-5KTL for first distributed solar power station at Dongying



ASP-4KTL for first distributed solar power station at Jinan



HF series for roof top solar power station of Hanergy Thin Film Power Group



ASP-20KTLC for 20KW distributed residential PV power station



HF series for roof top solar power station of Hanergy Thin Film Power Group

Our Projects



65MW Distributed PV projects at High-speed Service Areas, Shandong
This project at Taishan high-speed service area is the first one for demo, total installation about 260kw.

2MW roof top solar power station in Shandong Qingdao Changxin Footwear Industry
This project is 2MW grid-connected solar power station, which is invested and built by Qingdao Changxin Footwear Industry. This project uses factory plant and office building roof top, yearly generating capacity is up to 3,020,000KWh, can meet needs of production electricity for company.



92kw Distributed PV Projects at Jinan
This project is set up at factory rooftop of Jinan Runtong Steel Wire Brush Ltd. The rooftop is color steel tile and face south. Total area is about 660 sqm. Power generation is for own use and the rest power is fed into the grid.

15KW solar power station in Shandong Zoucheng Water Conservancy
This grid-connected solar power station is for national important irrigation demonstration project. Installed capacity is 15KW, floor space is about 200m². This system can meet needs of irrigation electricity for 1334000m², solve irrigation problem which affects local agriculture for several decades.



Poverty Relief PV Power Project at Laiwu
Total installation is 300KW at 5 villages. All power generation is fed into the grid. People there have stable income every year.

710kw Poverty Relief PV Power Projects at Dafengyang village, Pingyi County, Shandong
Total installation is 710kw. Every family can get about RMB3,800 each year.



Poverty Relief PV Power Projects at Pingyin County
These projects are located at 14 villages. Total installation is 360kw, about 30-50kw at each village. All generated power is fed into the grid. Stable income every year is RMB39,000-65,000

4.03MW Poverty Relief PV Power Projects at Heze
These projects are set up at over 155 villages. Total installation is 4.03MW, 26KW averagely at each village. All power generation is fed into the grid. Stable income for each village is about RMB35,000 every year.



Extensive After-Sale Service

Besides the high quality machines, we also offer you professional after-sale service. These service programs include:

- Life time technical support. Our experienced customer support team will help you solve technical problems. We guarantee to respond to your inquiry within 24 hours, whether it comes from phone, mail or fax.
- We provide detailed English operating manual and maintenance manual for each model of equipment. These manuals include lots of pictures to show the detail procedures for trouble shooting and spare parts replacement. Operating DVD will be provided upon request.
- We provide comprehensive training for our international distributors and clients.
- We provide life time spare parts mail service to our international clients.

WE ARE SEEKING FOR LONG TERM PARTNERSHIP

Our goal is to make you satisfied and successful, your needs are our top priority.



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