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YOUR TRUSTWORTHY SOLAR INVERTER AND STORAGE ODM PARTNER



COMPANY MILESTONES



Parent Company

APD

A leader in Power Electronics and Renewable Energy Technology

For over two decades, APD Group has been cultivating its business in the power industry, upholding core values of R&D innovation and expanding its business horizon with the goal of becoming a leader in power electronics and renewable energy.

APD has two business groups: Power Systems and Renewable Energy, focusing on power supply and PV inverter products respectively.

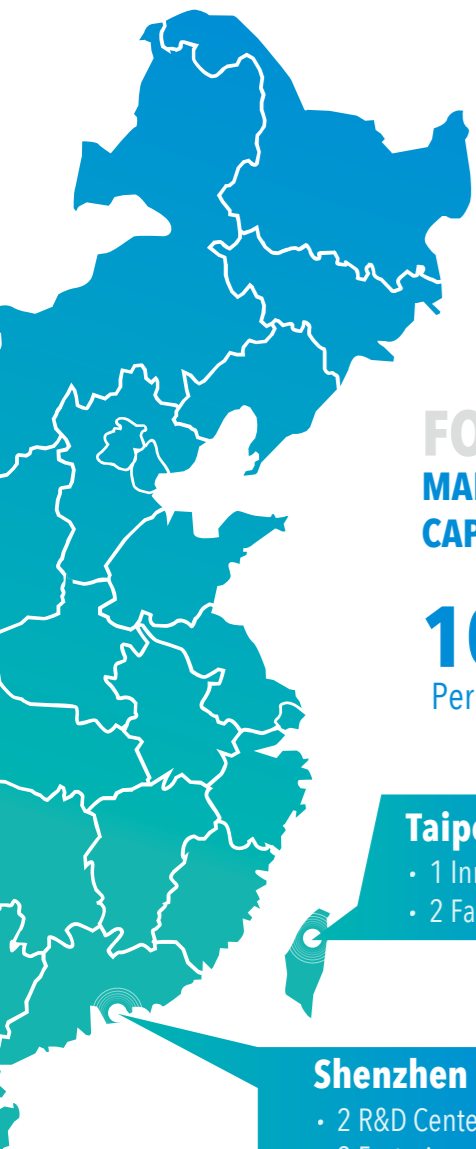
Subsidiary

Senergy

A leading ODM service supplier of PV inverters and energy storage solutions

Shenzhen Senergy Technology Co., Ltd., a wholly-owned subsidiary of Asian Power Devices Inc. (APD), is a high-tech solar energy company that supports customers in leading their next-generation PV inverters, from end-to-end design, research and development, to manufacturing and services – all under one roof.

With over 35 years of experience in power electronic products management and nearly 20 years of expertise in PV inverter development and manufacturing, Senergy provides flexible and diverse cooperation models to support rapid customized systems and help customers succeed. Our wide portfolio of products ranges from on-grid inverters to hybrid models, meeting the requirements of local, national and international standards.



FOOTPRINT MANUFACTURING CAPACITY

10_{GW}
Per Year

Taipei

- 1 Innovation Center
- 2 Factories

Shenzhen

- 2 R&D Centers
- 2 Factories

OUR COMPETITIVE ADVANTAGES

R&D

- Pioneers and practitioners of Chinese string inverter technology
- Dual research centers in Taipei and Shenzhen
- Integrated Product Development (IPD) process
- DFMEA & PFMEA-guaranteed product reliability

QUALITY CONTROL

- Comprehensive QC and GP system throughout product development and production processes
- Endorsed by the leading industry players

MANUFACTURING

- Dual manufacturing bases in Taipei and Shenzhen
- Full industry process ranging from PCBA manufacturing to burn-in tests
- Highly-automated production equipment and flexible production line



35 Years of ODM Expertise
in Power Electronic Products



Flexible and Diverse ODM
Cooperation Process



Rapid Customization
Management System



Customized Product
Design and Accessories

YOUR TRUSTWORTHY ODM PARTNER



QUALITY CONTROL IN MANUFACTURING PROCESS



1st Auto-optical
Detection for SMD



2nd Optical
Detection for PCBA



Functional Test
For PCBA



Conformal
Coating



Automated Hi-Pot
& Function Test



Burn in for 3-8h
in 40°C



2nd Function Test
after BI



Tightness Test for IP65
& Communication Test

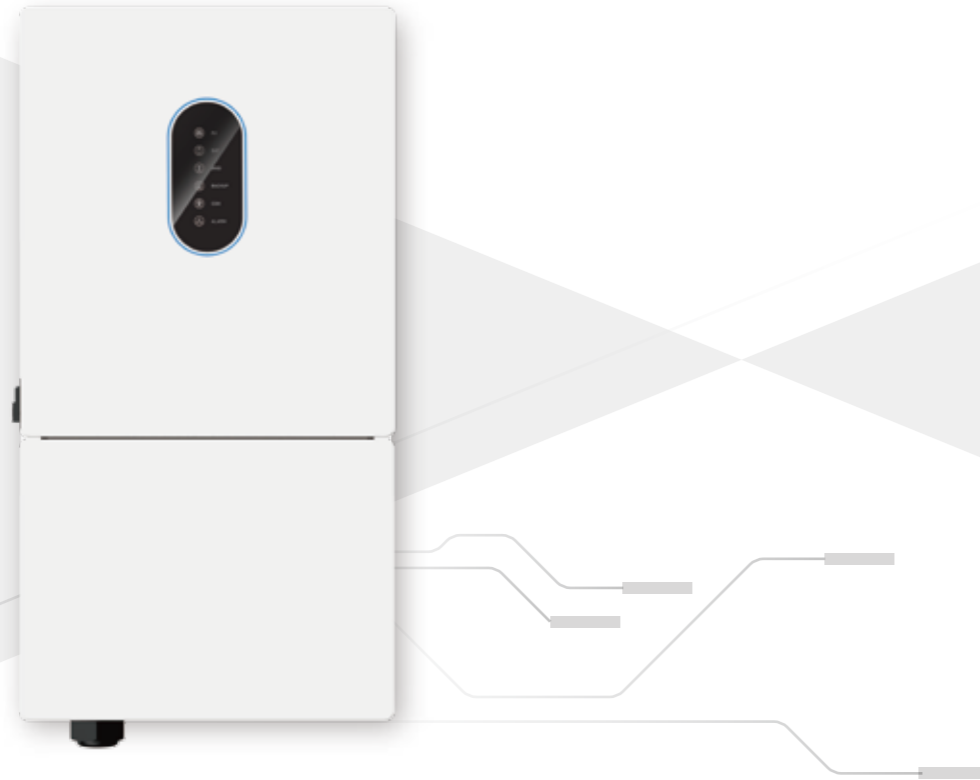
SHIPMENT



SPLIT PHASE HYBRID INVERTER

SE 5/6/7.6/10KHB-UL

ENERGY STORAGE INVERTER



MAXIMIZE PV INPUT POWER

- Up to 200% oversizing allowed with 3 MPPTs
- Support high power module with 30A PV input current
- Support AC coupled solar input
- Integrated arc fault circuit interrupter (AFCI) and Rapid Shutdown



FLEXIBLE BATTERY CONFIGURATION

- Built-in DC Breaker for safety and reliability
- Support 40-64V Lithium or Lead-acid battery
- Maximum battery charge/discharge current of 210A



VERSATILE APPLICATIONS

- Stackable up to 9 units
- Standby generator connection for whole-home back up
- Four application modes, mixed with time control
- Remote configuration and upgrade



STABLE OUTPUT POWER

- Continuous 110% of nominal AC power
- Support 120/240/208V connections
- Seamless backup transition (<10ms)

Model	SE 5KHB-130-D2/UL	SE 6KHB-130-D2/UL	SE 7K6HB-180 T2/UL	SE 10KHB-210-T2/UL
Efficiency				
Max. Efficiency (PV to AC)				98.0%
Max. Efficiency (BAT to AC)				94.5%
Input (PV)				
Max. PV Input Power	7,500W	9,000W	12,000W	15,000W
Max. PV Voltage	600V			
Start-up Voltage	90V			
MPPT Operating Voltage Range	70V-540V			
Max. Input Current per MPPT	30A/22A		30A/22A/22A	
Max short current per MPPT	40A/30A		40A/30A/30A	
String per MPPT	4 (2/2)		6 (2/2/2)	
Nos. of MPPT	2		3	
Input/Output (BAT)				
Battery Type	Lithium-ion/Lead-acid			
Nominal Battery Voltage	48V			
Battery Voltage Range	40V-64V			
Max. Charge/Discharge Current	210A/130A	210A/130A	210A/180A	210A/210A
Max. Charge/Discharge Power	10,000W/5,000W	10,000W/6,000W	10,000W/7,600W	11,400W/11,400W
Output (Grid)				
Nominal AC Output Power	5,000W	6,000W	7,600W	10,000W
Max. AC Output Apparent Power	5,500VA	6,600VA	7,600VA	11,400VA
Max. AC Output Power (PF=1)	5,500W	6,600W	7,600W	11,400W
Nominal AC Output Current	20.9A/24.1A	25A/28.9A	31.7A/36.6A	41.7A/47.5A
Max. AC Output Current	26.5A	31.8A	40.4A	47.5A
Nominal Grid Voltage	120V/240V (Split phase) / 208V (2/3 phase)			
Nominal Grid Frequency	50Hz/60Hz			
Grid Frequency Range	45Hz-55Hz/55Hz-65Hz (Adjustable)			
Power Factor	> 0.99 @rated power (Adjustable 0.8 LD - 0.8 LG)			
THDI	<3% (Rated Power)			
Output (Back up)				
Nominal Output Power	5,000W	6,000W	7,600W	10,000W
Nominal Output Current	20.9A/24.1A	25A/28.9A	31.7A/36.6A	41.7A/47.5A
Peak Power (1s)	10,000VA	12,000VA	15,200VA	20,000VA
Nominal Output Voltage	120V/240V (Split phase) / 208V (2/3 phase)			
Nominal Output Frequency	50Hz/60Hz			
Transfer Time	< 10ms			
THDV	<3% @100% R Load			
Protection				
Protection Category	Class I			
DC Switch	Yes			
Anti-islanding Protection	Yes			
AC Overcurrent Protection	Yes			
DC/AC Overvoltage Protection	DC Type II, AC Type III			
AC Short Circuit Protection	Yes			
DC Reverse Protection	Yes			
Surge Arrester	DC Type II, AC Type II			
Insulation Resistance Detection	Yes			
Leakage Current Protection	Yes			
AFCI	Yes			
RSD	Yes (APsystems Sunspec)			
Generator	Yes			
General				
Max. Operation Altitude	2000m			
Ingress Protection Degree	IP65/NEMA 3R			
Operating Temperature Range	-25°C~60°C (>45°C derating)			
Relative Humidity	0~100%			
Cooling Method	Fan Cooling			
Mounting	Wall bracket			
Dimensions (W*H*D)	16.5*31.5*9.4 inch (420mm*800mm*240mm)			
Weight	40Kg/88lb			
PV Connection Way	Terminals			
HMI & COM				
Display	Wireless & APP + LED, LCD (optional)			
Communication Interface	RS485/CAN (for BMS), DRM/RS485 (for meter), RS485, Optional: WiFi /LAN			
Certification				
Safety	UL 1741/CSA C22.2/UL 1699B			
Grid	UL1741SB, IEEE1547: 2018, HECO SRD 2.0			
EMC	FCC Part 15 Class B			
Warranty	5 Years			

Remarks:

- The range of output voltage and frequency may vary depending on different grid codes.
- Specifications are subject to change without advanced noticed.