PANDODO
POWER • DAY • HOME

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HOUSEHOLD ENERGY STORAGE SYSTEM

RELIABLE POWER SOLUTION EXPERT

PANDODO

BRINGING CLEAN ENERGY TO EVERY CORNER

COMPANY PROFILE

The birth of PANDODO stems from a pure original intention — inheriting the new energy technology accumulation of its parent company LILEAD, holding the vision of "bringing clean energy to every corner", and taking root in the vibrant land of Nigeria.

Founded in 2010, Shenzhen Ray-tech International Limited began as a specialist in customized battery solutions.

In 2015, we launched the LILEAD brand with a clear mission: to replace outdated lead-acid batteries with smarter, safer, and more powerful lithium energy.

"LILEAD" stands for Lithium, Leisure, and Lead—reflecting our commitment to innovation and redefining power for modern adventures.

For over a decade, we ' ve powered RVs, boats, house boat, and motorcycles worldwide with plug-and-play batteries built for Power & Ease—delivering high performance, long-term reliability, and true simplicity: just install and go.

Trusted globally, LILEAD continues to push the boundaries of lithium energy for leisure and marine applications.

Awards & Certifications





R&D and Manufacturing Base

LILEAD's R&D and manufacturing base integrates product design and technological innovation, equipped with advanced production facilities and a team of professionals. The facility strictly adheres to international quality management systems to ensure high product reliability and consistency. We continuously invest in innovation resources to drive technological advancement and product upgrades. Serving global market demands, the base also delivers customized solutions tailored to customer needs.



Why PANDODO

Hardcore Quality

Adopt industry-leading Grade A battery cells and intelligent BMS system, compatible with most inverter protocols on the market.

Deep Roots in Africa

Customized for African environments, adapted to local power grids and sunlight characteristics, solving the pain point of frequent power outages.

Local After-Sales Service

Set up after-sales service centers in Africa, with 24-hour response and timely product supply.

High Cost Performance

Affordable prices with ultra-high quality, enabling African families to easily access reliable and clean electricity.

BATTERIES

Leading Technology & Reliable Safety

Adopt industry-leading Grade A battery cells and intelligent BMS system, compatible with most inverter protocols on the market. It can connect to mainstream local photovoltaic equipment in Africa without additional modification.

Efficient Energy Storage & Cost Reduction

Supports mains and solar photovoltaic charging, making full use of solar energy advantages and grid time to reduce electricity costs.

Customized Solutions for Diverse Scenarios

Offers multiple capacity options from 5kWh to 17kWh, supports wall-mounted and floor-mounted installation, and can adapt to different housing types and electricity needs.

Long Lifespan & Worry-Free After-Sales

≥ 7000 charge cycles (with 80% capacity remaining), service life up to 10 years or more; provides 5-year whole machine warranty and 24-hour after-sales response.

Integrated Design

Some products adopt an energy storage all-in-one solution, integrating battery cells, inverter, BMS management system and monitoring module into the same chassis, with compact size and easy installation.

Solar Power in High-End Furniture Showrooms

Home Energy Storage Battery Installation Guide



ESS-05

Battery Tech Data

ESS-05		
Stored energy		5.120kWh
Rated capacity		100Ah
Nominal voltage		51.2V
Volt range		43.2V-57.6V
Charge time	Standard	2.2h
	Rapid	1.5h
Charge method CC-CV	Standard	50A/56V
	Rapid	100A/56V
	Surge(10s)	120A(10S)
Max discharge current	Continous	100A
Cycle life 25+2°C, 0.5C/0.5C	80%EOL	> 7000 cycles
Operating temperature range	Charge	0°C~60°C/32°F~140°F
	Discharge	-20°C~60°C/-4°F~140°F
	Storage(1month)	-20°C~45°C/-4°F~113°F
	Storage(6month)	0°C~35°C/32°F~95°F
Communication port		RS232/RS485/CAN
Approx weight		52kg /115lbs
Series & parallel connection		Max 16 batteriesin parallel connection. Series connection is not available.





Battery Tech Data

		ESS-10	ESS-12.5
Stored energy		10.240kWh	11.264kWh
Rated capacity		200Ah	220Ah
Nominal voltage		51.2V	51.2V
Volt range		43.2V~57.6V	43.2V~57.6V
Charge time	Standard	2.2h	2.2h
	Rapid	1.5h	1.5h
Charge method CC-CV	Standard	100A/56V	100A/56V
	Rapid	200A/56V	200A/56V
	Surge(10s)	210A(0.5S)	210A(0.5S)
Max discharge current	Continous	200A	200A
Cycle life 25+2°C, 0.5C/0.5C	80%EOL	> 7000 cycles	> 7000 cycles
Operating temperature range	Charge	0°C~60°C/32°F~140°F	0°C~60°C/32°F~140°F
	Discharge	-20°C~60°C/-4°F~140°F	-20°C~60°C/-4°F~140°F
	Storage(1month)	-20°C~45°C/-4°F~113°F	-20°C~45°C/-4°F~113°F
	Storage(6month)	0°C~35°C/32°F~95°F	0°C~35°C/32°F~95°F
Communication port		RS232/RS485/CAN	RS232/RS485/CAN
Approx weight		96kg /212lbs	98kg /216lbs
Series & parallel connection		Max 16 batteriesin parallel connection. Series connection is not available.	



Battery Tech Data

		ESS-15	ESS-17
Stored energy		14.336kWh	16.896kWh
Rated capacity		280Ah	324Ah
Nominal voltage		51.2V	51.2V
Volt range		43.2V~57.6V	43.2V~57.6V
Charge time	Standard	3.5h	3.5h
	Rapid	2.2h	2.2h
Charge method CC-CV	Standard	100A/56V	100A/56V
	Rapid	200A/56V	200A/56V
	Surge(10s)	210A(0.5S)	210A(0.5S)
Max discharge current	Continous	200A	200A
Cycle life 25+2°C, 0.5C/0.5C	80%EOL	> 7000 cycles	>7000 cycles
Operating temperature range	Charge	0°C~60°C/32°F~140°F	0°C~60°C/32°F~140°F
	Discharge	-20°C~60°C/-4°F~140°F	-20°C~60°C/-4°F~140°F
	Storage(1month)	-20°C~45°C/-4°F~113°F	-20°C~45°C/-4°F~113°F
	Storage(6month)	0°C~35°C/32°F~95°F	0°C~35°C/32°F~95°F
Communication port		RS232/RS485/CAN	RS232/RS485/CAN
Approx weight		116kg /255.74lbs	117kg/257.94lbs
Series & parallel connection		Max 16 batteriesin parallel connection. Series connection is not available.	





Battery Tech Data

		ESS25A	ESS03	ESS04	ESS25B
Stored energy		2560Wh	3584Wh	4020Wh	2560Wh
Rated capacity		200Ah	280Ah	314Ah	100Ah
Nominal voltage		12.8V	12.8V	12.8V	25.6V
Volt range		10V-14.4V	10V-14.4V	10V-14.4V	20V-28.8V
Charge time	Standard	5.5h	5.5h	5.5h	5.5h
	Rapid	2.5h	2.5h	2.5h	1.5h
Charge method CC-CV	Standard	60A/28V	60A/28V	60A/28V	20A/28V
	Rapid	150A/28V	150A/28V	150A/28V	100A/28V
Max discharge continous current		150A	150A	150A	100A
Cycle life 0.5C.23°C/73°F	50%	>7000 cycles	>7000 cycles	>7000 cycles	>7000 cycles
	100%	>2000 cycles	> 2000 cycles	>2000 cycles	>2000 cycles
Operating temperature range	Charge	0°C~55°C/32°F~131°F	0°C~55°C/32°F~131°F	0°C~55°C/32°F~131°F	0°C~55°C/32°F~131°F
	Discharge	-20°C~60°C/-4°F~140°F	-20°C~60°C/-4°F~140°F	20°C~60°C/-4°F~140°F	-20°C~60°C/-4F~140°F
	Storage(1month)	-20°C~45°C/-4°F~113°F	-20°C~45°C/-4°F~113°F	-20°C~45°C/-4°F~113°F	-20°C~45°C/-4°F~113°F
	Storage(6month)	-10°C~35°C/14°F~95°F	-10°C~35°C/14°F~95°F	-10°C~35°C/14°F~95°F	-10°C~35°C/14°F~95°F
Water proof		IP66	IP66	IP66	IP66
Flammability rating		/	/	/	UL94-V0
Approx weight		22kg/48.5lbs	27kg/59.5lbs	28kg/61.7lbs	22kg /48.5lbs
Series & parallel connection		· Maximum 4 in series connection.			· Maximum 2 in series connection.
		· Supports multiple batteries in parallel for yacht and RV applications.			
		· Batteries must be fully charged before connecting in series or parallel.			

Model	ESS01-300W	ESS01-500W
System Parameters		
Battery type	$LiFePO_4$	$LiFePO_4$
Nominal Voltage	3.2V	3.2V
Nominal Energy	1kWh	1kWh
Dimension (W*D*H)	320*220*142mm	320*220*142mm
Weight Approximate	≈10.5kg/23.15lbs	≈10.5kg/23.15lbs
IP Rating	IP20	IP20
Inverter Technical Parameters		
Maximum PV input power	300W	500W
Maximum PV input current	18A	18A
Minimum PV input voltage	11~55Vdc	11~55Vdc
VArray M axopen circuit voltage	60Vdc	60Vdc
MPPT voltage range	11Vdc	11Vdc
Maximum PV input current	10A	10A
AC input voltage range	100~264Vac	100~264Vac
Rated output power	300W	500W
Rated output voltage	230Vac	230Vac
AC output	Sine wave	Sine wave
Rated output frequency	50/60HZ	50/60HZ
Warranty Period	Battery 5 years/Inverter 2 years	Battery 5 years/Inverter 2 years

2kWh Solar Power Station
3kWh Solar Power Station



Model	ESS02-1.2KW	ESS03-2.0KW
System Parameters		
Battery type	$LiFePO_4$	$LiFePO_4$
Nominal Voltage	12.8V	12.8V
Operating Voltage	11~14.4V	11~14.4V
Nominal Capacity	180Ah	268Ah
Nominal Energy	2.3kWh	3.43kWh
Dimension (W*D*H)	440*250*790mm	536*262*380mm
Weight Approximate	≈27.8kg/61.29lbs	≈35.6kg/78.48lbs
IP Rating	IP20	IP20
Inverter Technical Parameters		
Maximum PV input power	800W	3000W
Maximum PV input current	18A	18A
Minimum PV input voltage	17~115Vdc	30~400Vdc
Maximum PV input voltage	115Vdc	400Vdc
PV start-up voltage	20Vdc	40Vdc
MPPT voltage range	20Vdc	40Vdc
Maximum PV input current	18A	18A
AC input voltage range	90~280Vac	90~280Vac
AC rated voltage	208/220/230/240Vac	208/220/230/240Vac
Rated output power	1200W	2000W
Rated output voltage	230Vac	230Vac
AC output	Sine wave	Sine wave
Rated output frequency	50/60HZ	50/60HZ
Warranty Period	Battery 5 years / Inverter 2 years	Battery 5 years / Inverter 2 years

8kWh Solar Power Station



Model	ESS08-3.6KW		
Inverter Output Parameters			
Rated Output Power	3000W	Max Output Power	3600W
Nominal Voltage	208/220/230/240Vac	Output Waveform	Pure Sine Wave
Voltage Regulation Rate	±5%	Nominal Frequency	50/60Hz
Battery Input Parameters			
Nominal Battery Voltage	25.6Vdc	Battery Operating Voltage Range	20~29.2Vdc
Charging Current	2~100A	Default Charging Current	60A (Mains + Solar PV)
Charging Mode	2-stage / 3-stage (Auto Setting)	Charging Accuracy	±5%
Max Solar PV Charging Current	100A	Max Mains/Generator Charging Current	80A
Max Hybrid Charging Current	100A		
PV Input Parameters			
Max Solar PV Input Power	5000W	Max Solar PV Input Current	18A
Max Efficiency	99.5% max	PV Voltage Accuracy	±2%
MPPT Voltage Range	40~450Vdc	Recommended PV Configuration Voltage	MPPT Voltage：300~340V OCV:370~430V
MPPT Voltage	500Vdc		
PV Start-up Voltage	60Vdc	Open Circuit Voltage	40Vdc
Mains / Generator Input Parameters			
Nominal Voltage	230Vac	Input Voltage Range	90~280Vac
Nominal Frequency	50/60Hz		
Battery Pack Parameters			
Cell Chemistry	LiFePO4	Configuration	1P8S
Nominal Voltage	25.6Vdc	Nominal Capacity	324Ah
Operating Voltage Range	22~28.8V	Energy	8.448KWh
Standard Charge/Discharge Current	100A	Max Charge/Discharge Current	200A
Cycle Life	>6000 Cycles（80%DOD）	Communication Protocol	CAN/RS485
Communication Parameters			
Display	LCD	Communication	CAN/RS485
Monitoring	WiFi(Optional)		

INVERTER

- High Conversion Efficiency
- High Power Density
- Modular Design
- Highly Integrated, Simplified Installation & Maintenance
- Safety Assurance & Intelligent Management





L 6000 ES

DC Input		AC Output	
Max. Recommended PV Power (STC)	8000W	AC Nominal Power	6000W
Start Voltage	80+5V	Max. AC Apparent Power	6000VA
MPPT Voltage Range	60V~450V	Output Current	26.1A
No. of MPPT Trackers	2	Nominal AC Voltage	208/220/230/240V
No. of PV Strings perMPPT	2	AC Grid Frequency	50/60Hz
Max. Input Current perMPPT	16A+16A	Adjustable Power Factor	0.8 leading ~ 0.8 lagging
Max. DC Voltage	500V	THDi	<5%
Battery Data (DC)		Backup Power (AC)	
Nominal DC Voltage	48V	AC Nominal Output Power	6000W
Battery Voltage Range	40~60V	Nominal AC Output Voltage	230V
Battery Overcharge Protection	60V	Nominal AC Output Frequency	50/60Hz
		Switch Time	10ms typ, 20ms max (single); <30ms (parallel)

General Data			
Dimensions (W/H/D)	422/460/125mm	Cooling	DC Fan
Weight	13.5kg/29.76lbs	Protection Degree	IP20
Operating Temp Range	-20°C~+50°C	Relative Humidity	5%~95% (non-condensing)
Topology	Transformerless	Altitude	<2000m
Communication	WiFi/4G	Warranty	5 years
Peak Efficiency	96.5%	AC Over Current Protection	Yes
European Efficiency	95.5%	AC Over Voltage Protection	Yes
		Ground Fault Monitoring	Yes
		Grid Monitoring	Yes
		Anti-Islanding Protection	Yes
		Residual-Current Monitoring	Yes
		Insulation Resistance Monitoring	Yes
		Surge Protection	Yes

L 8000 ES



DC Input		AC Output	
Max. Recommended PV Power (STC)	10000w	AC Nominal Power	8000W
Start Voltage	120V	Max. AC Apparent Power	8000VA
MPPT Voltage Range	60V-480V	Output Current	34.8A
No. of MPPT Trackers	N	Nominal AC Voltage	230V
No. of PV Strings perMPPT	1	AC Grid Frequency	50/60Hz
Max. Input Current perMPPT	27A	Adjustable Power Factor	0.8 leading ~ 0.8 lagging
Max. DC Voltage	550V	THDi	<5%
Battery Data (DC)		Backup Power (AC)	
Nominal DC Voltage	48V	AC Nominal Output Power	8000W
Battery Overcharge Protection	60V	Nominal AC Output Voltage	230V
Max charging and discharging current	190A/200A	Nominal AC Output Frequency	50/60Hz
		Switch Time	<20ms@Single <30ms@Parallel

General Data			
Dimensions (W/H/D)	550/465/150mm	Cooling	DC Fan
Weight	21.5kg	Protection Degree	IP20
Operating Temp Range	-10°C..+50°C	Relative Humidity	5%~95% (non-condensing)
Topology	Transformerless	Altitude	<2000m
Communication	WiFi/4G	Warranty	5 years
Peak Efficiency	96.5%	AC Over Current Protection	Yes
European Efficiency	95.5%	AC Over Voltage Protection	Yes
Noise emission(typical)	<75dB	Ground Fault Monitoring	Yes
Self-consumption	<75W	Grid Monitoring	Yes
		Anti-Islanding Protection	Yes
		Residual-Current Monitoring	Yes
		Insulation Resistance Monitoring	Yes
		Surge Protection	Yes

L 12000 ES



DC Input		AC Output	
Max. Recommended PV Power (STC)	15000w	AC Nominal Power	12000w
Start Voltage	120V	Max. AC Apparent Power	12000VA
MPPT Voltage Range	60V-480V	Output Current	52.2A
No. of MPPT Trackers	2	Nominal AC Voltage	230V
No. of PV Strings perMPPT	1	AC Grid Frequency	50/60Hz
Max. Input Current perMPPT	27A	Adjustable Power Factor	0.8 leading ~ 0.8 lagging
Max. DC Voltage	550V	THDi	<5%
Battery Data (DC)		Backup Power (AC)	
Nominal DC Voltage	48V	AC Nominal Output Power	12000W
Battery Overcharge Protection	60V	Nominal AC Output Voltage	230V
Max charging and discharging current	250A/280A	Nominal AC Output Frequency	50/60Hz
		Switch Time	<20ms@Single <30ms@Parallel

General Data			
Dimensions (W/H/D)	550/465/150mm	Cooling	DC Fan
Weight	21.5kg	Protection Degree	IP20
Operating Temp Range	-10°C..+50°C	Relative Humidity	5%~95% (non-condensing)
Topology	Transformerless	Altitude	<2000m
Communication	WiFi/4G	Warranty	5 years
Peak Efficiency	96.5%	AC Over Current Protection	Yes
European Efficiency	95.5%	AC Over Voltage Protection	Yes
Noise emission(typical)	<75dB	Ground Fault Monitoring	Yes
Self-consumption	<75W	Grid Monitoring	Yes
		Anti-Islanding Protection	Yes
		Residual-Current Monitoring	Yes
		Insulation Resistance Monitoring	Yes
		Surge Protection	Yes

SOLAR PANEL

- High-Efficiency Power Generation, Maximizing Energy Yield
- Intelligent Matching, Optimizing System Performance
- Safety & Durability, Ensuring Long-Term Returns
- Flexible Adaptability, Meeting Diverse Needs

435W-460W



Electrical Specifications [1]

Module Type	TYL435M108HBG		TYL440M108HBG		TYL445M108HBG		TYL460M108HBG	
Testing Condition	STC [2]	NMOT [3]	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power(Pmax/W)	435	327	440	331	445	335	460	339
Maximum Power Current (Imp/A)	13.33	10.78	13.40	10.83	13.47	10.89	13.54	10.95
Maximum Power Voltage (Vmp/V)	32.64	30.49	32.84	30.67	33.04	30.86	33.24	31.05
Short-circuit Current (Isc/A)	13.83	11.14	13.90	11.19	13.97	11.25	14.04	11.31
Open-circuit Voltage (Voc/V)	39.20	37.13	39.40	37.32	39.60	37.51	39.80	37.70
Module Efficiency STC (%)	21.8		22.0		22.3		22.5	

[1] Measurements according to IEC 60904-3, Measurement tolerance: ISC: 4%,VOC: 3%, Bifaciality: 80% 5%

[2] STC (Standard Test Condition): Radiation 1000 W/m^2, Module temperature 25°C, AM = 1.5

[3] NMOT: Radiation 800 W/m^2, Ambient temperature 20 °C, AM = 1.5, Wind Speed 1 m/s

Operating Parameters

Operating Temperature (°C)	-40 to +85
Maximum System Voltage(V)	1500 DC (IEC)
Overcurrent protection rating (A)	30
Power Performance Tolerance (%)	0 / +3
Protection class	II
Max. Test Load, Push/Pull (Pa)	Snow 5400 / Wind 2400
Max. Design Load, Push/Pull (Pa)	3600 / 1600

Mechanical Parameters

Cell Type	N -type Mono-crystalline, 108 (6x18)
Dimensions (mm)	1762 x 1134 x 30
Weight (kg)	20.4
Front Cover	1.6 mm heat strengthened glass with anti -reflective coating
Rear Cover	1.6 mm heat strengthened glass
Junction Box	3 Diodes, IP68 according to IEC 62790
Cables	4mm^2/Portrait: 350mm (+)/250mm(-) Landscape: 1100mm(+)/1100mm(-) Length can be customized
Connector Type	PV-ZH202B or MC4-EVO2A (1500V)

Temperature Ratings(STC)

Nominal Module Operating Temperature (NMOT)	42±2°C
Temperature Coefficient of Pmax (%/ °C)	-0.29
Temperature Coefficient of Voc (%/ °C)	-0.25
Temperature Coefficient of Isc (%/ °C)	+0.048

Mechanical Loading

Max. Test Load, Push/Pull (Pa)	Snow 5400/ Wind 2400
Max. Design Load, Push/Pull (Pa)	3600/1600

Bifacial Output-Rearside Power Gain

10%	Pmax (STC)	479	484	490	495
20%	Pmax (STC)	522	528	534	540
30%	Pmax (STC)	566	572	579	585

580W-615W



Electrical Characteristics STC:AM1.5 1000W/m² 25°C NOCT:AM1.5 800W/m² 20°C 1m/s Testuncertainty for Pmax:±3%

Module Type	AOX-72M10HC580W	AOX-72M10HC585W	AOX-72M10HC590W	AOX-72M10HC595W	AOX-72M10HC600W	AOX-72M10HC605W	AOX-72M10HC610W	AOX-72M10HC615W
Testing Condition	STC NOCT	STC NOCT	STC NOCT	STC NOCT	STC NOCT	STC NOCT	STC NOCT	STC NOCT
Maximum Power(Pmax/W)	580W 438W	585W 442W	590W 446W	595W 450W	600W 454W	605W 458W	610W 462W	615W 466W
Voltage at Maximum Power(Vmp/V)	43.50 40.70	43.70 40.90	43.90 41.10	44.10 41.30	44.30 41.50	44.50 41.70	44.70 41.90	44.90 42.10
Currentat Maximum Power(Imp/A)	13.34 10.76	13.37 10.81	13.44 10.86	13.50 10.90	13.55 10.94	13.60 10.99	13.65 11.03	13.70 11.07
Open Circuit Voltage(VocV)	50.50 47.70	50.70 47.90	50.90 48.10	51.10 48.30	51.30 48.50	51.50 48.70	51.70 48.90	51.90 49.10
Short Circuit Current(Isc/A)	14.08 11.36	14.14 11.41	14.19 11.46	14.25 11.51	14.30 11.55	14.35 11.60	14.41 11.64	14.46 11.68
Module Efficiency(%)	22.40%	22.60%	22.80%	23.00%	23.20%	23.40%	23.60%	23.80%

Mechanical Parameters

Cell Type	N-Type TopCon Half-cut Cell
No. of Cells	144
Front Cover	2.0 mm glass, high transmission, AR coated, tempered
Encapsulation	EVA
Back Cover	2.0mm,HeatStrengthenedGlass
Junction Box	IP68 rated, 3 bypass diodes
Frame	30 mm anodized aluminium alloy
Cable	1 x 4 mm², 350 mm length or customized
Connectors	MC 4/ MC 4 compatible
Weight	31.5kg
Dimension	2278*1134*30mm
Packaging	962pcs/40HQ Container

Tip: The number of double-glass modules placed flatly cannot exceed 15 pieces.

Operating Parameters

Operational Temperature	-40~+85°C
Power Output Tolerance	0~5W
Voc and Isc Tolerance	+3%
Maximum System Voltage	1500VDC(IEC)
Maximum Series Fuse Rating	25A
Nominal Operational Cell Temperature	43+2°C
Protection Class	Class II
Fire Rating	ULtype 1 or 2 IEC Class C

Temperature Ratings(STC)

Temperature Coefficient of Isc	0.04%/°C
Temperature Coefficient of Voc	-0.24%/°C
Temperature Coefficient of Pmax	-0.30%/°C

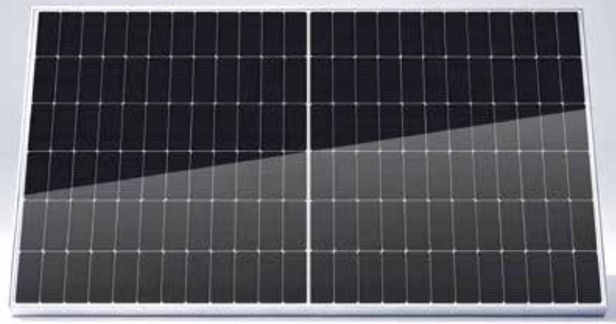
Mechanical Loading

Snow Load	5400 Pa or 550 kg/m²
Wind Load	2400 Pa or 244 kg/m²
Hail Resistance	Max. ø 25 mm at 23 m/s

Bifacial Output-Rearside Power Gain

5%	Maximum Power (Pmax)	609W	614W	620W	625W	630W	635W	641W	646W
	Module Effciency STC(%)	23.5%	23.7%	23.9%	24.2%	24.4%	24.6%	24.8%	25.0%
10%	Maximum Power (Pmax)	638W	649W	655W	660W	666W	671W	677W	
	Module Effciency STC(%)	24.6%	24.9%	25.1%	25.3%	25.5%	26.0%	26.2%	

620W-650W



Electrical Characteristics STC:AM1.5 1000W/m² 25°C NOCT:AM1.5 800W/m² 20°C 1m/s Testuncertainty for Pmax:±3%

Module Type	AOX-132G12RHC620W	AOX-132G12RHC625W	AOX-132G12RHC630W	AOX-132G12RHC635W	AOX-132G12RHC640W	AOX-132G12RHC645W	AOX-132G12RHC650W
Testing Condition	STC NOCT	STC NOCT	STC NOCT	STC NOCT	STC NOCT	STC NOCT	STC NOCT
Maximum Power(Pmax/W)	620W 471W	625W 475W	630W 479W	635W 483W	640W 487W	645W 491W	650W 495W
Voltage at Maximum Power(Vmp/V)	41.10 38.60	41.30 38.80	41.50 39.00	41.70 39.20	41.90 39.40	42.10 39.60	42.30 39.80
Currentat Maximum Power(Imp/A)	15.09 12.20	15.13 12.24	15.18 12.28	15.23 12.32	15.28 12.36	15.33 12.40	15.37 12.44
Open Circuit Voltage(VocV)	49.20 46.60	49.40 46.80	49.60 47.00	49.80 47.20	50.00 47.40	50.20 47.60	50.40 47.80
Short Circuit Current(Isc/A)	15.94 12.89	15.98 12.93	16.03 12.97	16.08 13.00	16.14 13.05	16.19 13.09	16.23 13.12
Module Efficiency(%)	22.90%	23.00%	23.30%	23.50%	23.70%	23.90%	24.10%

Mechanical Parameters

Cell Type	N-Type TopCon Half-cut Cell
No. of Cells	132
Front Cover	2.0 mm glass, high transmission, AR coated, tempered
Encapsulation	EVA
Back Cover	2.0mm,HeatStrengthenedGlass
Junction Box	IP68 rated, 3 bypass diodes
Frame	30 mm anodized aluminium alloy
Cable	1 x 4 mm², 350 mm length or customized
Connectors	MC 4/ MC 4 compatible
Weight	32.5kg
Dimension	2382*1134*30mm
Packaging	740pcs/40HQ Container

Tip: The number of double-glass modules placed flatly cannot exceed 15 pieces.

Operating Parameters

Operational Temperature	-40~+85°C
Power Output Tolerance	0~5W
Voc and Isc Tolerance	+3%
Maximum System Voltage	1500VDC(IEC)
Maximum Series Fuse Rating	25A
Nominal Operational Cell Temperature	43+2°C
Protection Class	Class II
Fire Rating	ULtype 1 or 2 IEC Class C

Temperature Ratings(STC)

Temperature Coefficient of Isc	0.04%/°C
Temperature Coefficient of Voc	-0.24%/°C
Temperature Coefficient of Pmax	-0.30%/°C

Mechanical Loading

Snow Load	5400 Pa or 550 kg/m²
Wind Load	2400 Pa or 244 kg/m²
Hail Resistance	Max. ø 25 mm at 23 m/s

Bifacial Output-Rearside Power Gain

5%	Maximum Power (Pmax)	651W	656W	662W	667W	672W	677W	683W	
	Module Effciency STC(%)	24.0%	24.2%	24.5%	24.7%	24.9%	25.1%	25.3%	
10%	Maximum Power (Pmax)	682W	688W	693W	699W	705W	710W	715W	
	Module Effciency STC(%)	25.2%	25.3%	25.6%	25.9%	26.1%	26.3%	26.5%	