

WERAN

Harness the Sun, Energize Your World.

WERAN



I Weran Solar Co.,Ltd.

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✉ Email Address: Info@weransolar.com

🌐 www.weransolar.com

Weran Solar Co. , Ltd .

COMPANY PROFILE

Weran Solar Co., Ltd. (hereinafter referred to as WERAN), established in 2015, is a professional new energy enterprise specializing in the development of solar intelligent power generation systems, integrating product design, manufacturing, sales, installation, and equipment maintenance.

The company's main business scope includes the manufacturing and processing of photovoltaic modules, international trade in the field of new energy, EPC contractual and construction services for new energy projects, self-investment in new energy projects, and investment and construction of new energy vehicle charging stations, among other comprehensive business services. Complementing other industries, it has developed new forms like "agricultural and photovoltaic complementarity" and "photovoltaic industrial and commercial synergy."

The company has multiple management departments and several business departments, and its business covers multiple countries and regions worldwide, including photovoltaic power generation, environmental energy generation, and trade services, among other industries.

WERAN has wholly-owned subsidiaries such as Tekshine Energy (Taizhou) Co., LTD., Weran Technology (Jiangsu) Co., LTD., Jiangsu Dingyan Engineering Technology Co., LTD., Shanghai Ruizexi Energy Technology Co., LTD., and Musheng Energy (Xi 'an) Co., LTD.

The company aims to establish itself in Shanghai, leverage independent production in Taizhou, Jiangsu, expand into international markets, deepen its presence in the new energy sector, integrate industrial chain development, lay out comprehensive business service formats, and drive the development of cities and the new energy industry

WERAN



China

Company Name: Weran Solar Co., Ltd.

Address: Building 3, No.666 Shenhong Road, Huacao Town, Minhang District, Shanghai, China

Email: Info@weransolar.com

Tel/WhatsApp: +86-021-33582679

Nigeria

Company Name: RAYONNANCE ENERGY FZE

Address: Lekki Free Trade Zone, Ibeju-Lekki, Lagos, Nigeria

Email: Jesse.L.li@weransolar.com

Tel/WhatsApp: +234-9130212022

Pakistan

Company Name: Zem Co

Address: SHOP NO 93 NEW SABZI MANDI, KARACHI, PAKISTAN.

Email: zemcorp10@gmail.com

Tel/WhatsApp: +92-332-8777703

Brazil

Company Name: RSP IMP EXP PROD SERV LTDA

Address: AV. HENRIQUETA MENDES GUERRA, 1330, SALA317, BARUERI SP BRAZIL CEP 06401-160

Email: solar@rsp-international.com.br

Tel/WhatsApp: (+55 11) 4212-7775

Bangladesh

Company Name: World Power Engineering

Address: 163 Nawabpur Road Dhaka-1000

Email: hasanworldpower@yahoo.com
hasanworldpower@gmail.com

Tel/WhatsApp: +8801716359878

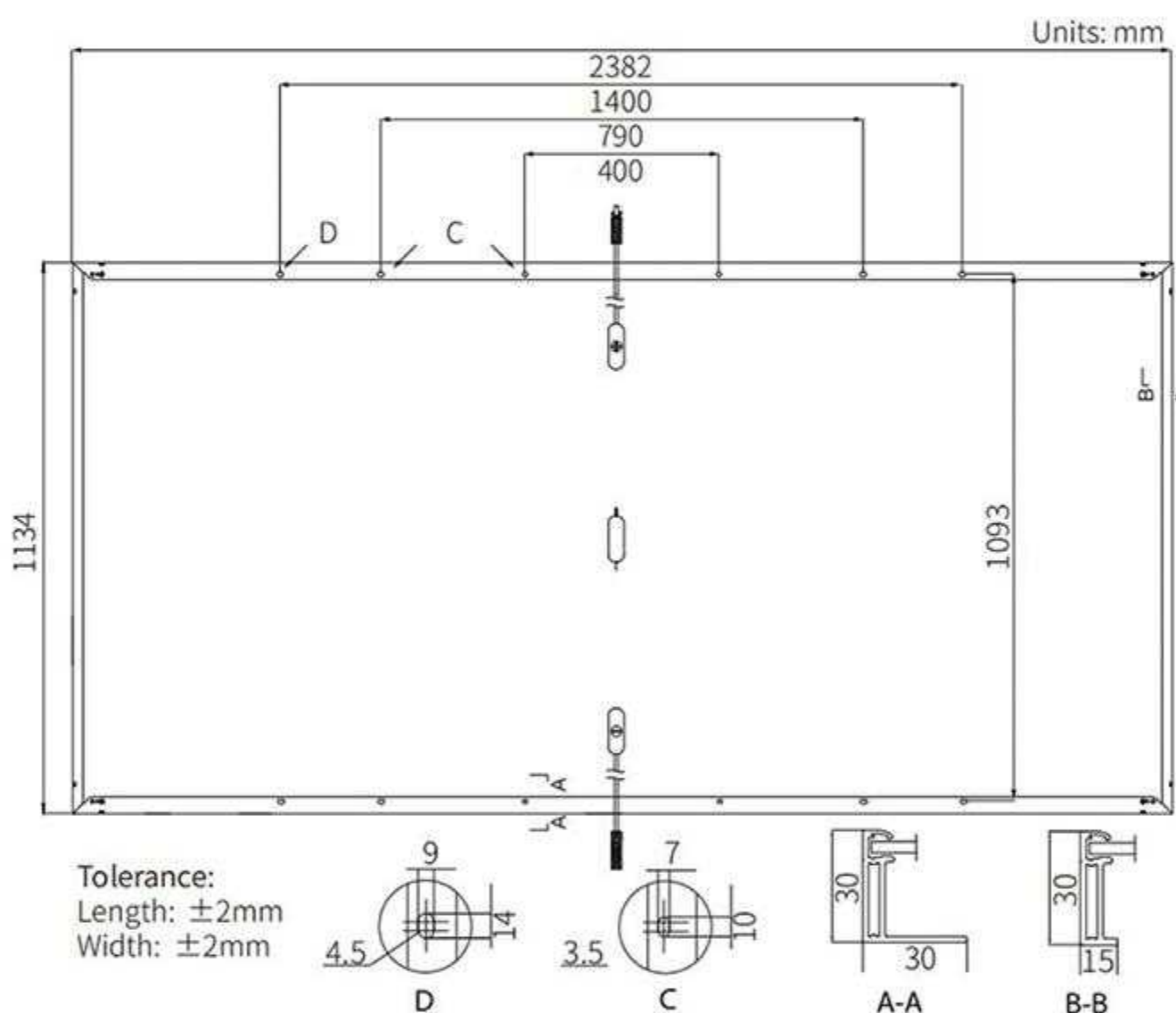
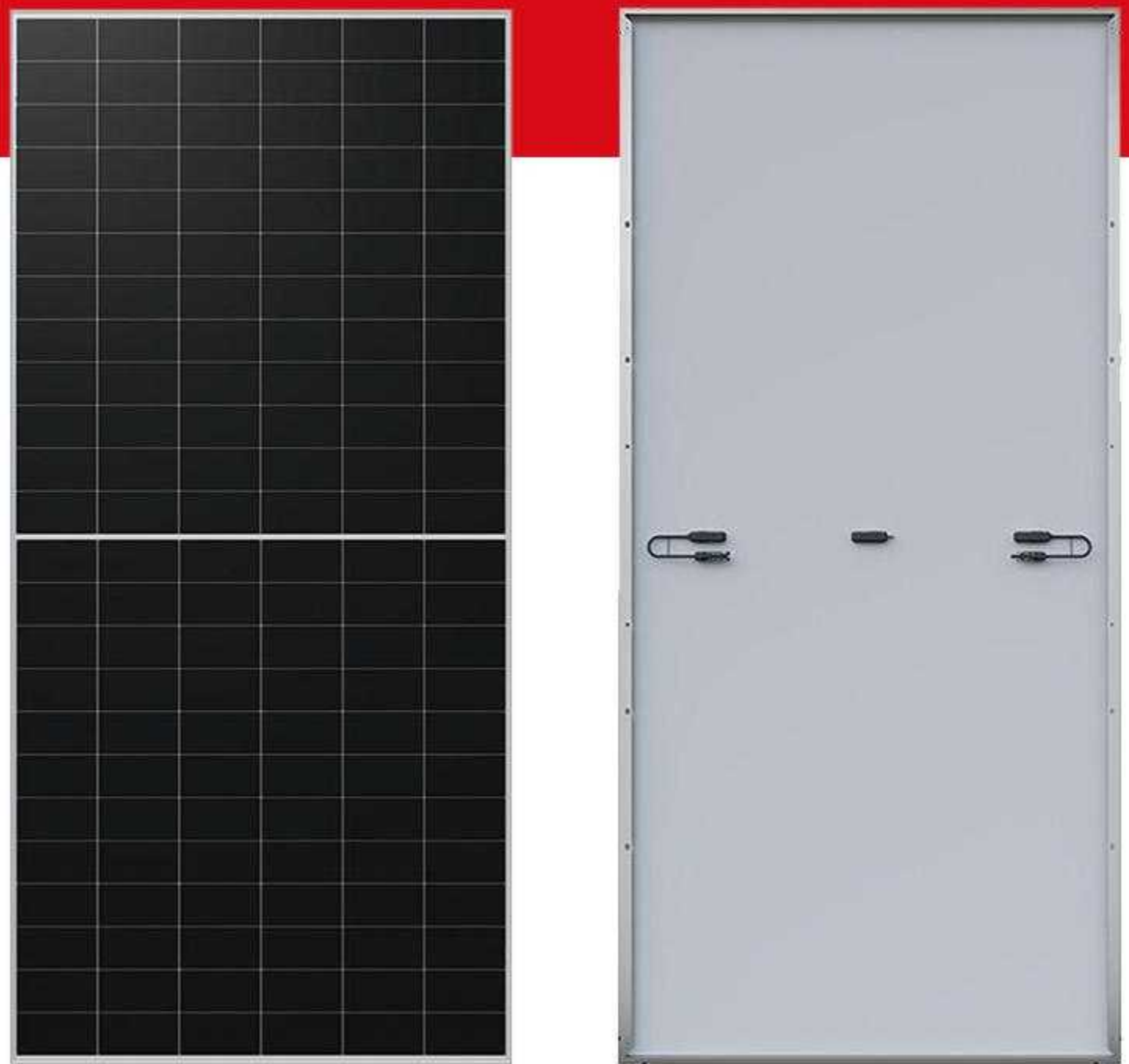
HPBC

LR7-72HTH 595~620M

-  Suitable for Distribution Market
-  HPBC Cell and TaiRay Inside, Provide Stronger Power Generation Performance
-  Optimum Size-Lower Transportation Costs and BOS Costs
-  Full Back Welding Technology Enhances Panels' Resistance to Micro-cracking
-  No grid line on the front surface

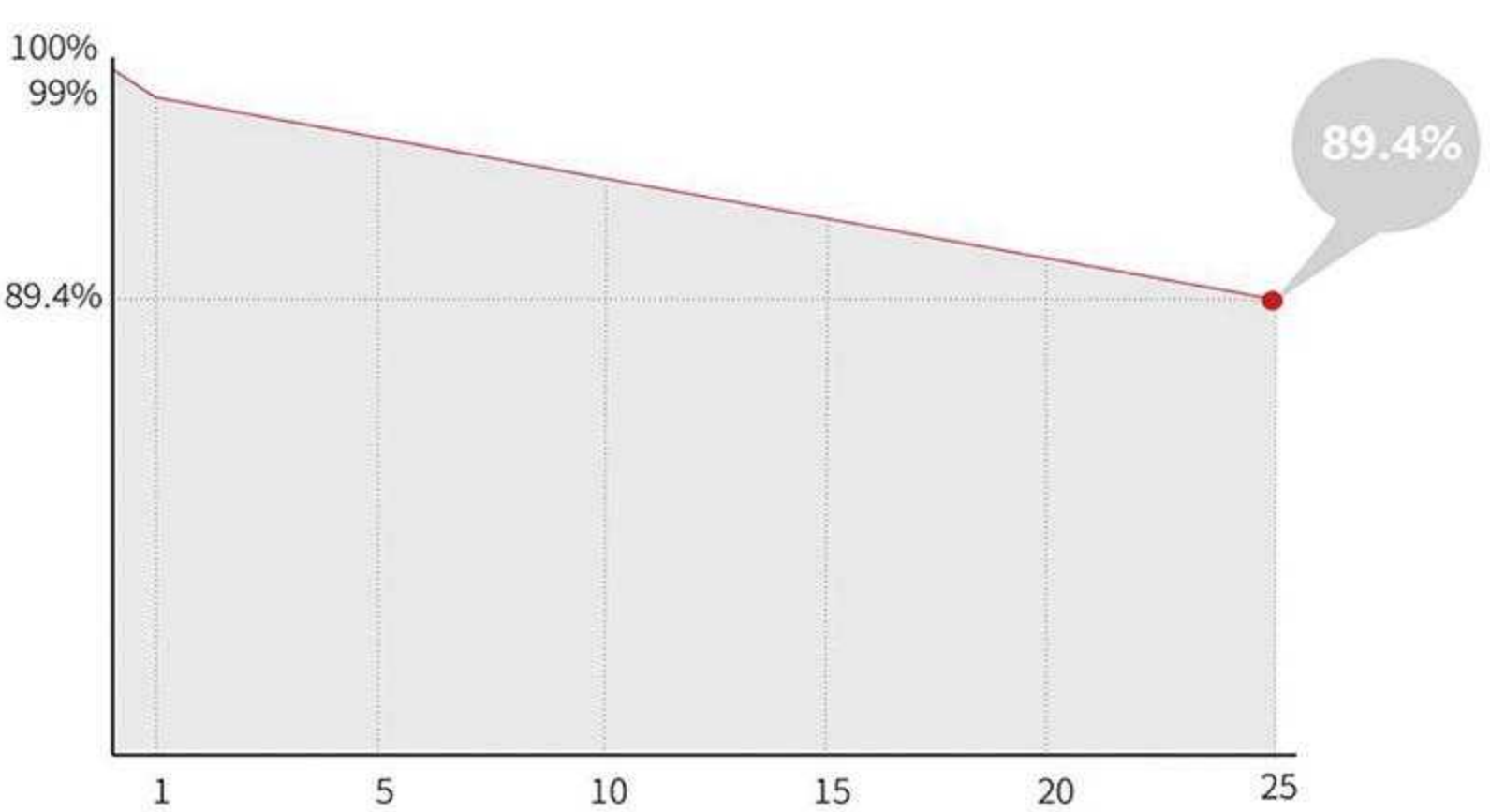
 12-year Warranty for Materials and Processing

 25-year Warranty for ExtraLinear Power Output



Additional Value

25-Year Power Warranty



Mechanical Parameters

Cell Orientation	144(6x24)
Junction Box	IP68-LONGi junction box
Output Cable	4mm², ±1400mm
Glass	Single glass, 3.2mm coated tempered glass
Frame	Anodized aluminum alloy frame
Weight	28.5kg
Dimension	2382x1134x30mm
Packaging	36pcs per pallet / 144pcs per 20'GP / 720pcs per 40'HC

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

Module Type	LR7-72HTH-595M		LR7-72HTH-600M		LR7-72HTH-605M		LR7-72HTH-610M		LR7-72HTH-615M		LR7-72HTH-620M	
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	595	444.7	600	448.4	605	452.1	610	455.9	615	459.6	620	463.4
Open Circuit Voltage (Voc/V)	51.97	48.97	52.12	49.11	52.27	49.17	52.42	49.22	52.57	49.36	52.72	49.59
Short Circuit Current (Isc/A)	14.62	11.81	14.68	11.86	14.74	11.91	14.80	11.95	14.87	12.01	14.93	12.06
Voltage at Maximum Power (Vmp/V)	43.72	39.90	43.88	40.04	44.03	40.18	44.18	40.32	44.33	40.46	44.48	40.59
Current at Maximum Power (Imp/A)	13.62	11.15	13.69	11.21	13.75	11.26	13.81	11.31	13.88	11.36	13.94	11.42
Module Efficiency(%)	22.0		22.2		22.4		22.6		22.8		23.0	

Operating Parameters

Operational Temperature	-40°C~+85°C
Power Output Tolerance	0~3%
Maximum System Voltage	DC1500V (IEC/UL)
Maximum Series Fuse Rating	25A
Nominal Operating Cell Temperature	45±2°C
Protection Class	Class II
Fire Rating	IEC Class C

Mechanical Loading

Front Side Maximum Static Loading	5400Pa
Rear Side Maximum Static Loading	2400Pa
Hailstone Test	25mm Hailstone at the speed of 23m/s

Temperature Ratings (STC)

Temperature Coefficient of Isc	+0.050%/°C
Temperature Coefficient of Voc	-0.230%/°C
Temperature Coefficient of Pmax	-0.280%/°C

Complete System and Product Certifications

IEC 61215, IEC 61730, UL61730
ISO9001: 2015:ISO Quality Management System
ISO14001: 2015:ISO Environment Management System
ISO45001: 2018:Occupational Health and Safety
IEC62941: Guideline for module design qualification and type approval



23.0%

MAX MODULE
EFFICIENCY

0~3%

POWER
TOLERANCE

<1%

FIRST YEAR
POWER DEGRADATION

0.40%

YEAR 2~25
POWER DEGRADATION

N Type

WR7-72HGD 585~620M

-  Suitable for Distribution Market
-  N-Type Cell, TOPCon Technology
-  23.0% Maximum Module Efficiency
-  Optimum Size-LowerTransportation Costs and BOS Costs
-  Dual Glass -Up to 25% Additional Electricity Generation

 12-year Warranty for Materials and Processing

 30-year Warranty for ExtraLinear Power Output

Complete System and Product Certifications

IEC 61215, IEC 61730, UL61730
ISO9001: 2015: ISO Quality Management SystemI
ISO14001: 2015: ISO Environment Management SystemI
ISO45001: 2018: Occupational Health and Safety
IEC62941: Guideline for module design qualification and type approval



23.0%

MAX MODULE
EFFICIENCY

0~3%

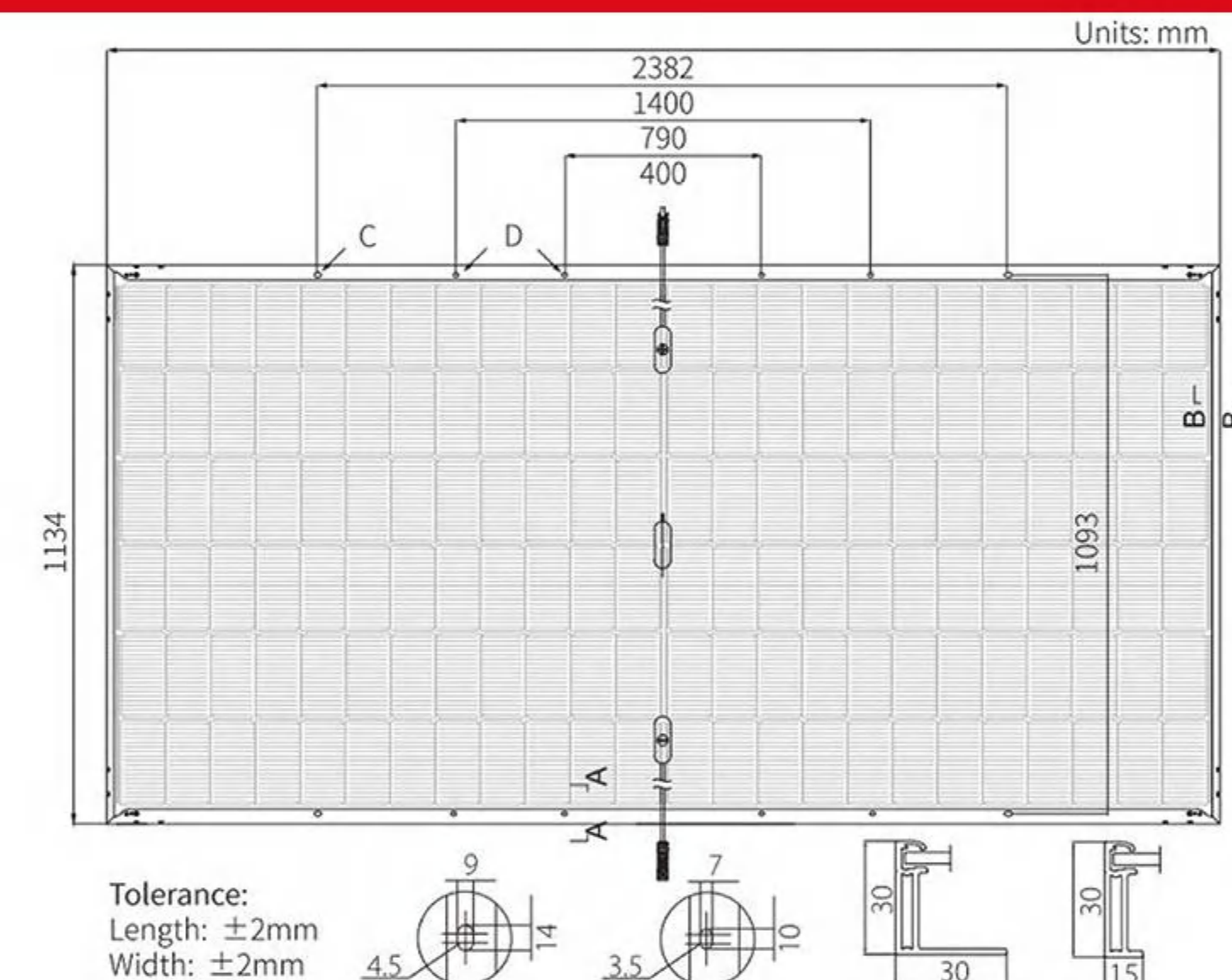
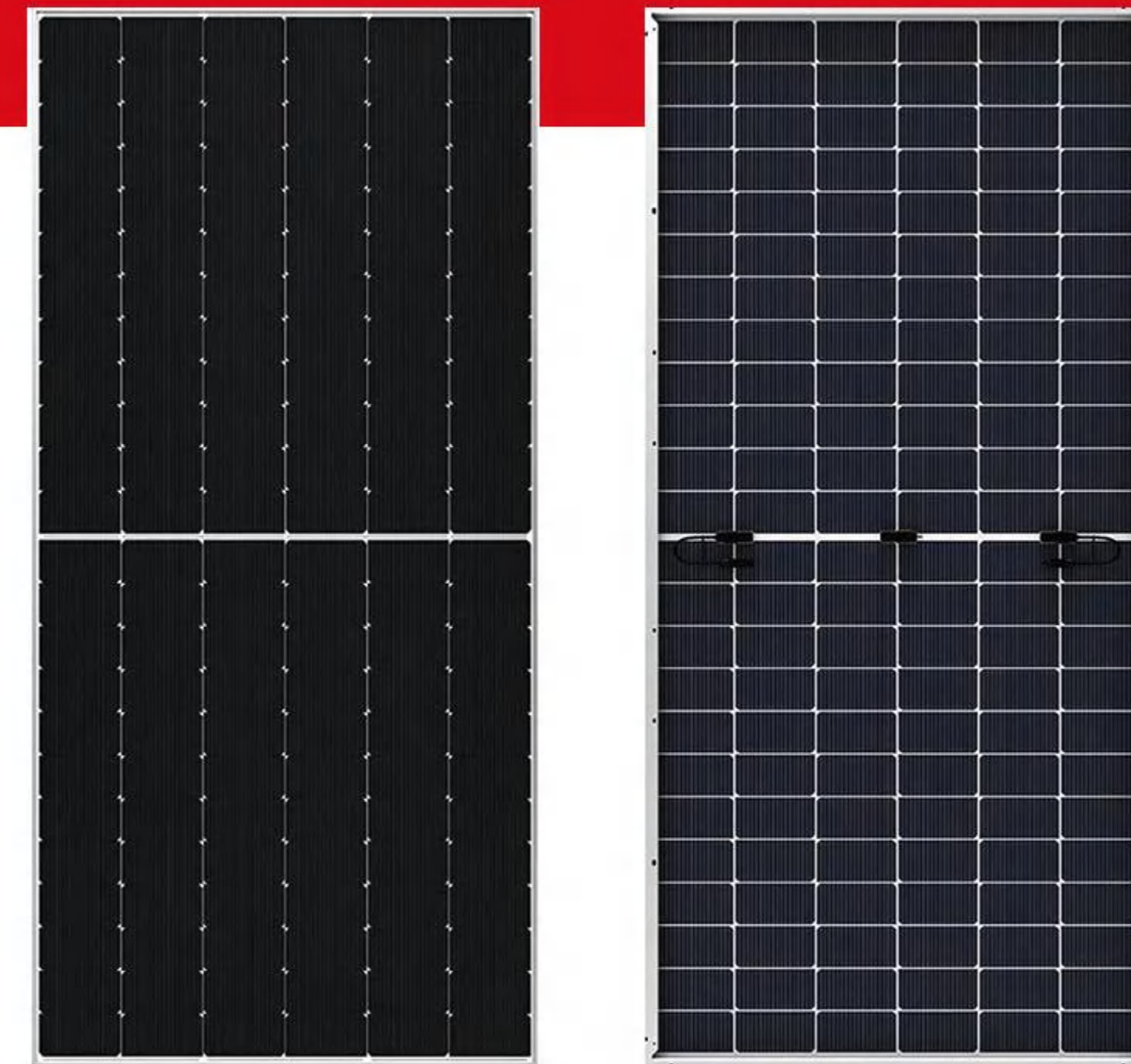
POWER
TOLERANCE

<1.5%

FIRST YEAR
POWER DEGRADATION

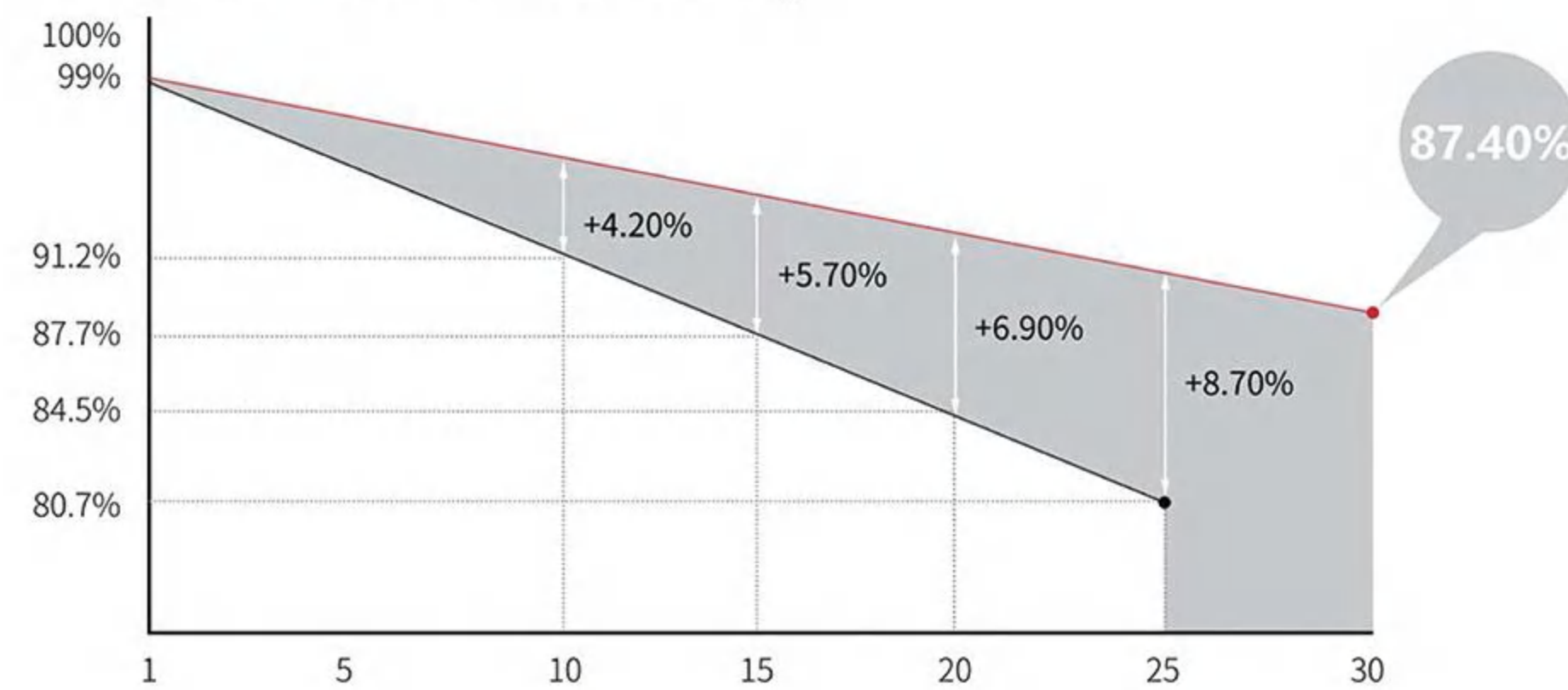
0.40%

YEAR 2~30
POWER DEGRADATION



Additional Value

30-Year Power Warranty



Mechanical Parameters

Cell Orientation	144 (6x24)
Junction Box	IP68, three diodes
Output Cable	4mm², +400, -200mm±1400mm length can be customized
Glass	Dual glass, 2.0+2.0mm semi-tempered glass
Frame	Anodized aluminum alloy frame
Weight	33.5kg
Dimension	2382x1134x30mm
Packaging	36pcs per pallet / 144pcs per 20'GP / 720pcs per 40'HC

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

Module Type	WR7-72HGD-585M		WR7-72HGD-590M		WR7-72HGD-595M		WR7-72HGD-600M		WR7-72HGD-605M		WR7-72HGD-610M		WR7-72HGD-615M		WR7-72HGD-620M	
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	585	445.3	590	449.1	595	452.9	600	456.7	605	460.6	610	464.4	615	468.2	620	472.0
Open Circuit Voltage (Voc/V)	52.01	49.43	52.12	49.53	52.23	49.64	52.34	49.74	52.44	49.84	52.55	49.94	52.66	50.04	52.77	50.15
Short Circuit Current (Isc/A)	14.29	11.48	14.37	11.54	14.45	11.61	14.53	11.67	14.61	11.74	14.69	11.80	14.77	11.86	14.85	11.92
Voltage at Maximum Power (Vmp/V)	43.57	41.41	43.68	41.45	43.79	41.63	43.90	41.72	44.00	41.82	44.11	41.92	44.22	42.03	44.33	42.13
Current at Maximum Power (Imp/A)	13.43	10.76	13.51	10.82	13.59	10.88	13.67	10.95	13.75	11.02	13.83	11.08	13.91	11.14	13.99	11.21
Module Efficiency(%)	21.7		21.8		22.0		22.2		22.4		22.6		22.8		23.0	

Electrical characteristics with different rear side power gain (reference to 605W front)

Pmax/V	Voc/V	Isc/A	Vmp/V	Imp/A	Pmax gain
635	52.44	15.35	44.00	14.44	5%
666	52.44	16.08	44.00	15.13	10%
696	52.54	16.81	44.10	15.81	15%
726	52.54	17.54	44.10	16.50	20%
756	52.54	18.27	44.10	17.19	25%

Operating Parameters

Operational Temperature	-40°C~+85°C
Power Output Tolerance	0~3%
Maximum System Voltage	DC1500V (IEC/UL)
Maximum Series Fuse Rating	30A
Nominal Operating Cell Temperature	45±2°C
Protection Class	Class II
Bifaciality	80+5%
Fire Rating	UL type 29, IEC Class C

Mechanical Loading

Front Side Maximum Static Loading	5400Pa
Rear Side Maximum Static Loading	2400Pa
Hailstone Test	25mm Hailstone at the speed of 23m/s

Temperature Ratings (STC)

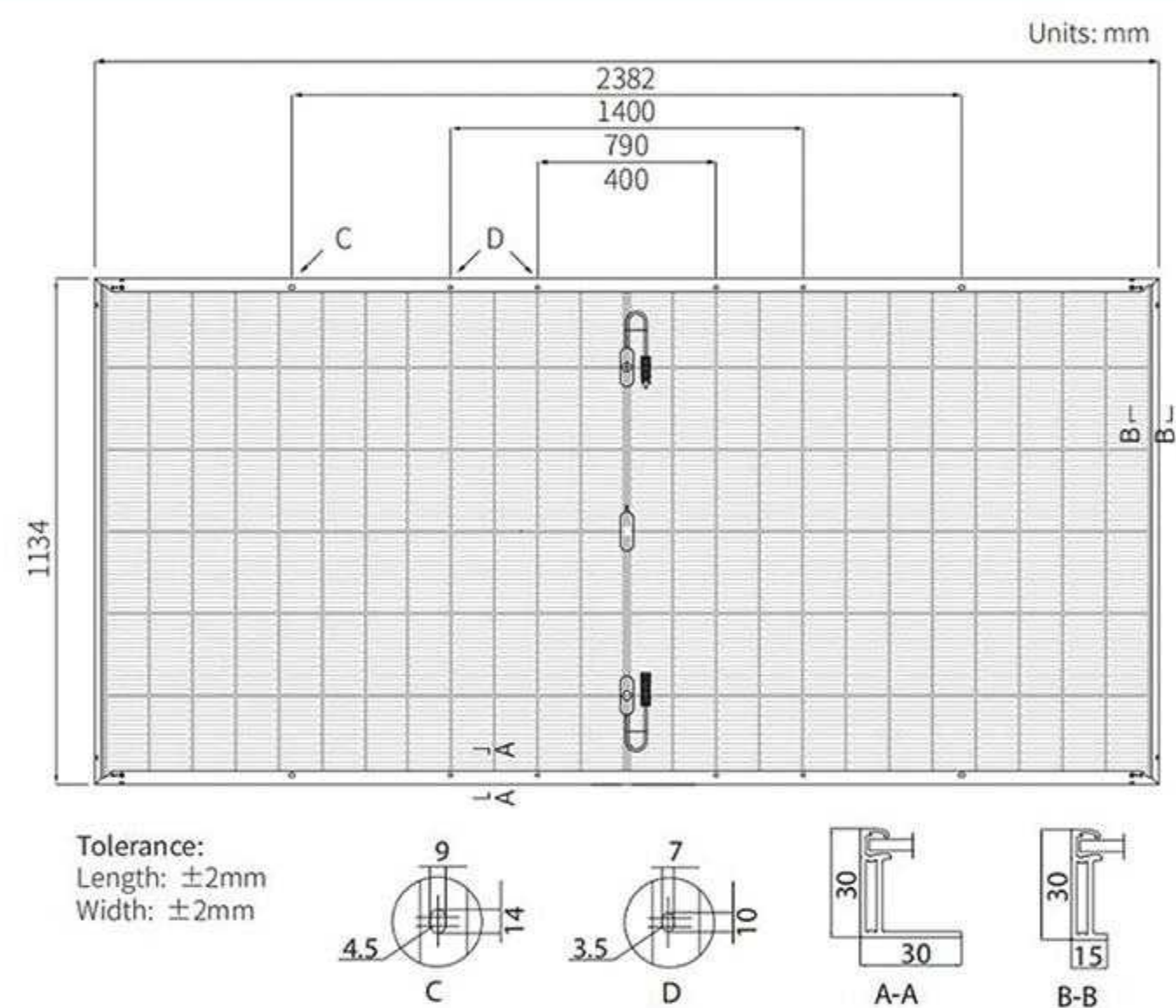
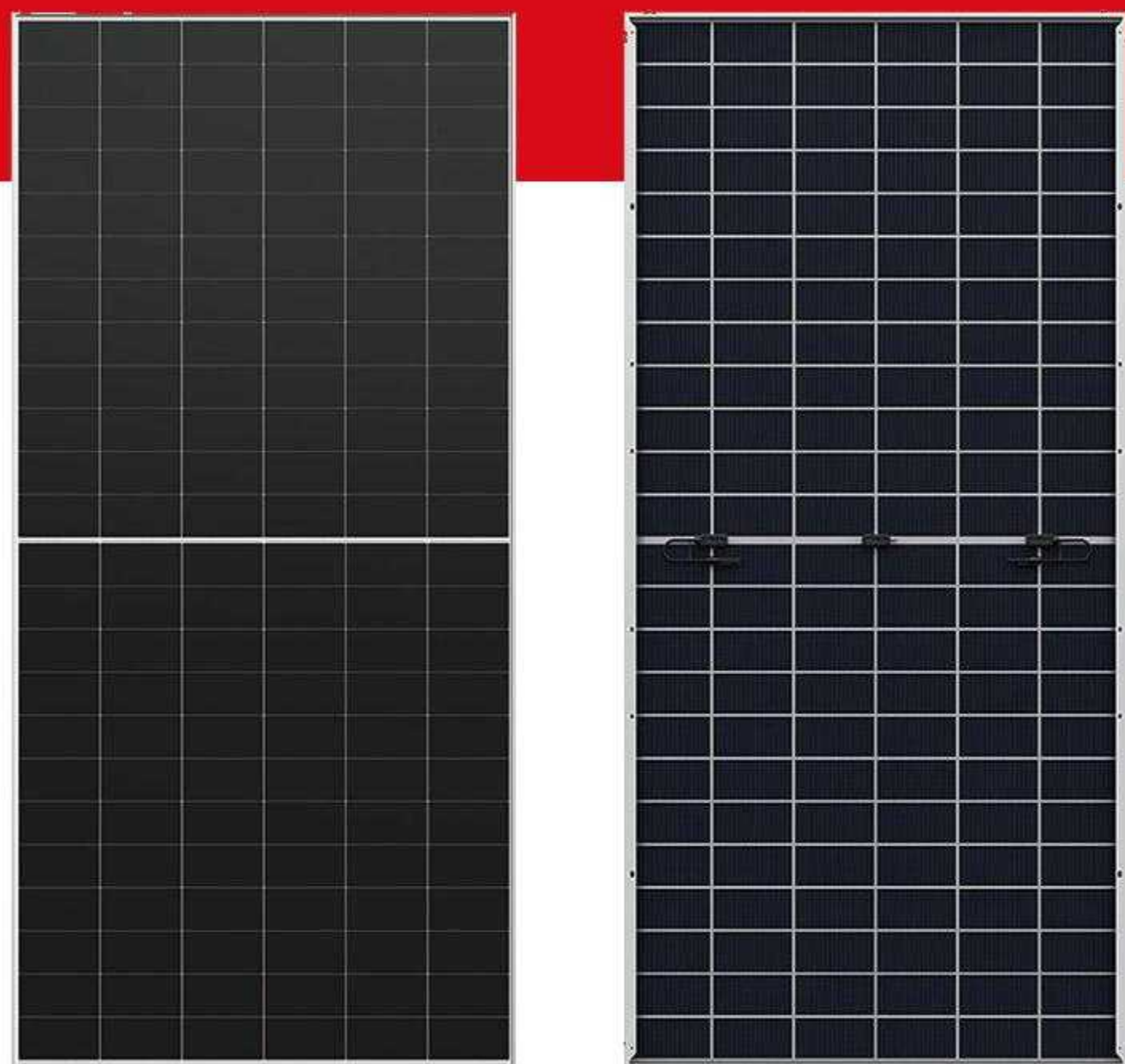
Temperature Coefficient of Isc	+0.045%/°C
Temperature Coefficient of Voc	-0.230%/°C
Temperature Coefficient of Pmax	-0.280%/°C

HPBC 2.0

WR7-72HVD 640~665M

- Products for utility with optimal power generation through the entire lifecycle
- Peak efficiency with top power generation performance
- TaiRay wafer & BC technology enhances high product reliability
- 24.6% Maximum Module Efficiency
- Optimum Size - Lower Transportation Costs and BOS Costs

- 15-year Warranty for Materials and Processing
- 30-year Warranty for ExtraLinear Power Output



Additional Value



Mechanical Parameters

Cell Orientation	144 (6x24)
Junction Box	IP68, three diodes
Output Cable	4mm², +400, -200mm±1400mm length can be customized
Glass	Dual glass, 2.0+2.0mm semi-tempered glass
Frame	Anodized aluminum alloy frame
Weight	33.5kg
Dimension	2382x1134x30mm
Packaging	36pcs per pallet / 144pcs per 20'GP / 720pcs per 40'HC

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

Module Type	WR7-72HVD-640M		WR7-72HVD-645M		WR7-72HVD-650M		WR7-72HVD-655M		WR7-72HVD-660M		WR7-72HVD-665M	
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	640	487	645	491	650	495	655	499	660	502	665	506
Open Circuit Voltage (Voc/V)	54.02	51.34	54.12	51.43	54.22	51.53	54.32	51.62	54.42	51.72	54.52	51.81
Short Circuit Current (Isc/A)	14.98	12.03	15.06	12.10	15.14	12.16	15.22	12.22	15.30	12.29	15.35	12.33
Voltage at Maximum Power (Vmp/V)	44.67	42.45	44.77	42.55	44.87	42.64	44.97	42.74	45.07	42.83	45.17	42.93
Current at Maximum Power (Imp/A)	14.33	11.49	14.41	11.55	14.49	11.61	14.57	11.68	14.65	11.75	14.72	11.80
Module Efficiency(%)	23.7		23.9		24.1		24.2		24.4		24.6	

Electrical characteristics with different rear side power gain (reference to 665W front)

Pmax/W	Voc/V	Isc/A	Vmp/V	Imp/A	Pmax gain
688	54.32	15.98	44.97	15.30	5%
721	54.32	16.74	44.97	16.03	10%
755	54.42	17.50	45.07	16.76	15%
788	54.42	18.26	45.07	17.48	20%
821	54.42	19.03	45.07	18.21	25%

Operating Parameters

Operational Temperature	-40°C~+85°C
Power Output Tolerance	0~3%
Maximum System Voltage	DC1500V (IEC)
Maximum Series Fuse Rating	30A
Nominal Operating Cell Temperature	45±2°C
Protection Class	Class II
Bifaciality	70±5%
Fire Rating	UL type 29, IEC Class C

Mechanical Loading

Front Side Maximum Static Loading	5400Pa
Rear Side Maximum Static Loading	2400Pa
Hailstone Test	25mm Hailstone at the speed of 23m/s

Temperature Ratings (STC)

Temperature Coefficient of Isc	+0.050%/°C
Temperature Coefficient of Voc	-0.200%/°C
Temperature Coefficient of Pmax	-0.260%/°C

Complete System and Product Certifications

IEC 61215, IEC 61730
ISO9001: 2015:ISO Quality Management System
ISO14001: 2015:ISO Environment Management System
ISO45001: 2018:Occupational Health and Safety
IEC62941: Guideline for module design qualification and type approval



24.6%

MAX MODULE
EFFICIENCY

0~3%

POWER
TOLERANCE

<1%

FIRST YEAR
POWER DEGRADATION

0.35%

YEAR 2~30
POWER DEGRADATION

HPBC

HIGH EFFICIENCY CELLS

WR5-72HTH 565~585M

-  Suitable for Distribution Market
-  Simple design embodies modern style
-  Better energy generation performance
-  High-quality module guarantees long-term reliability

15 YEAR
15-year Warranty for Materials and Processing

25 YEAR
25-year Warranty for Extra Linear Power Output

Complete System and Product Certifications

IEC 61215, IEC 61730, UL 61730
ISO9001:2015: ISO Quality Management System
ISO14001: 2015: ISO Environment Management System
ISO45001: 2018: Occupational Health and Safety
IEC62941: Guideline for module design qualification and type approval



22.6%

MAX MODULE EFFICIENCY

0~3%

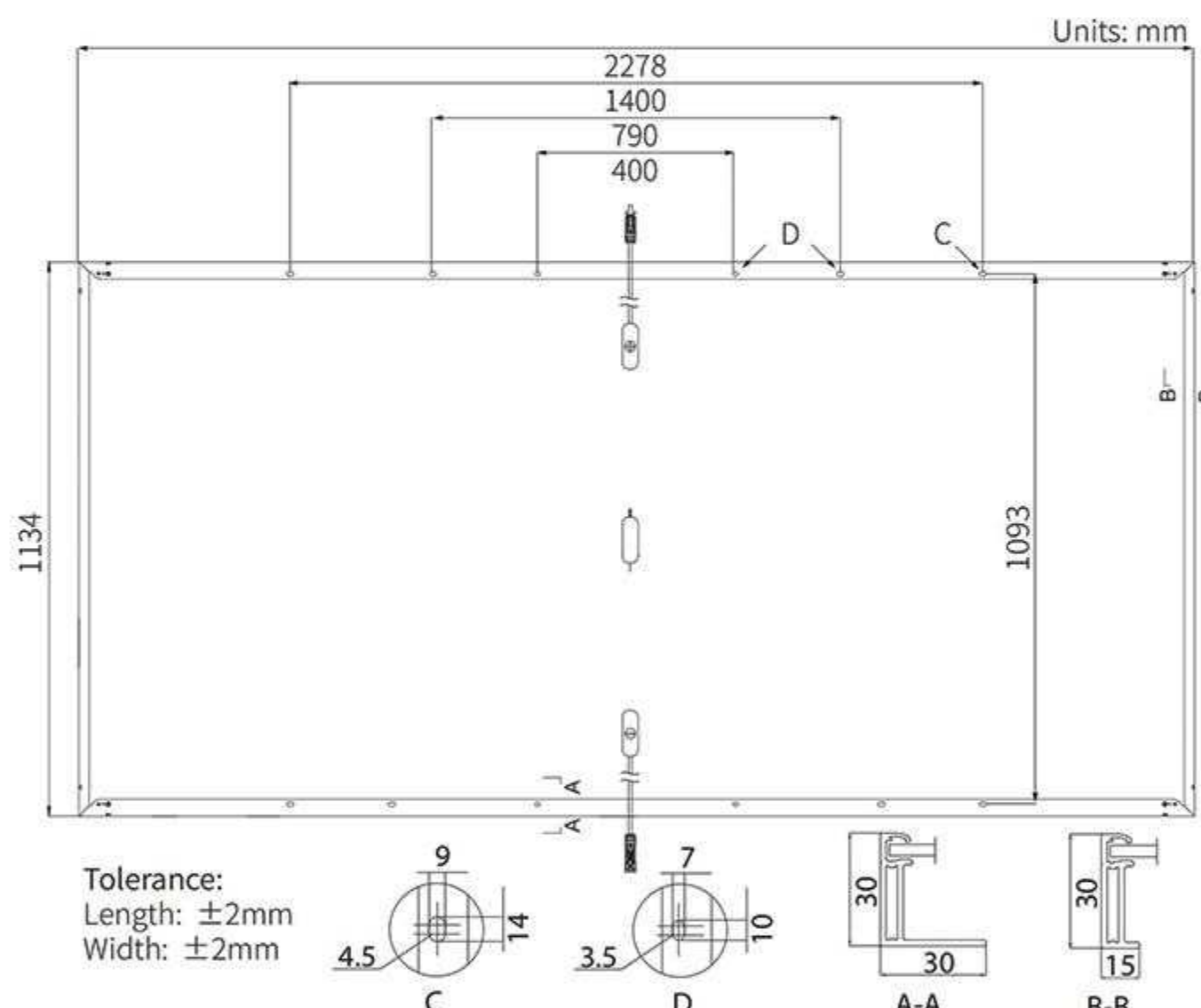
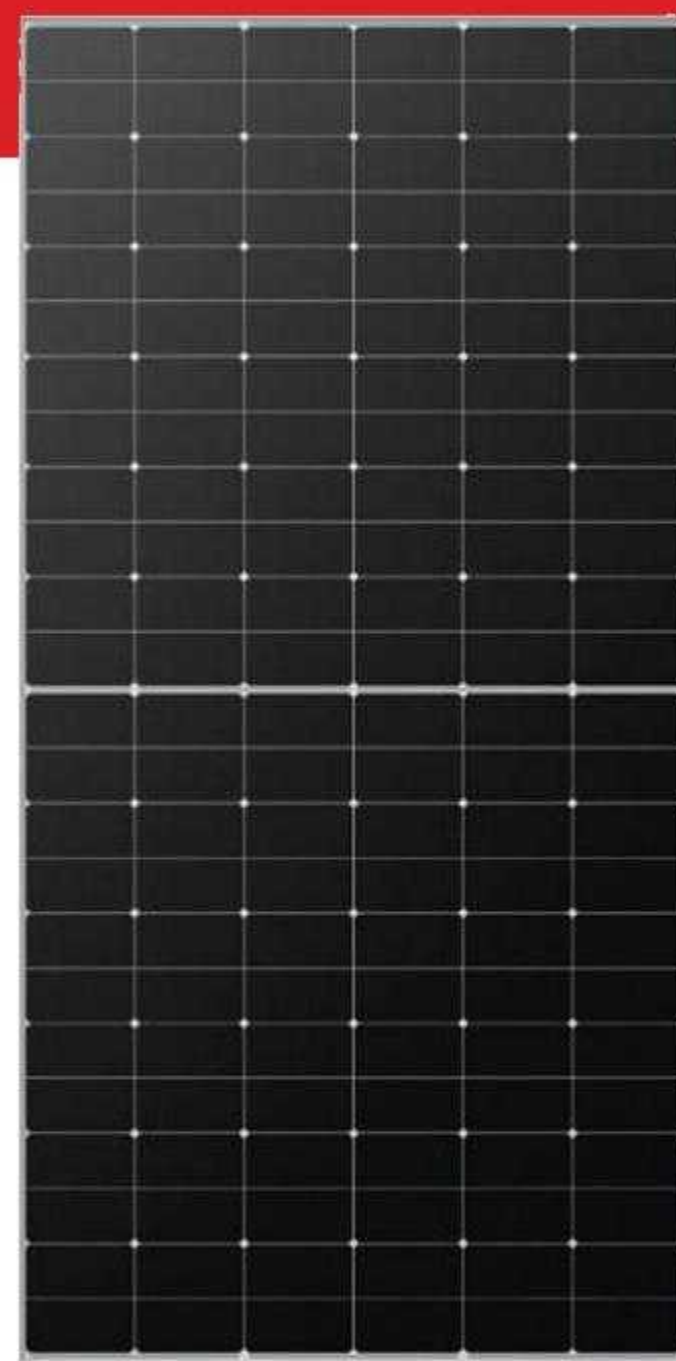
POWER TOLERANCE

<1.5%

FIRST YEAR POWER DEGRADATION

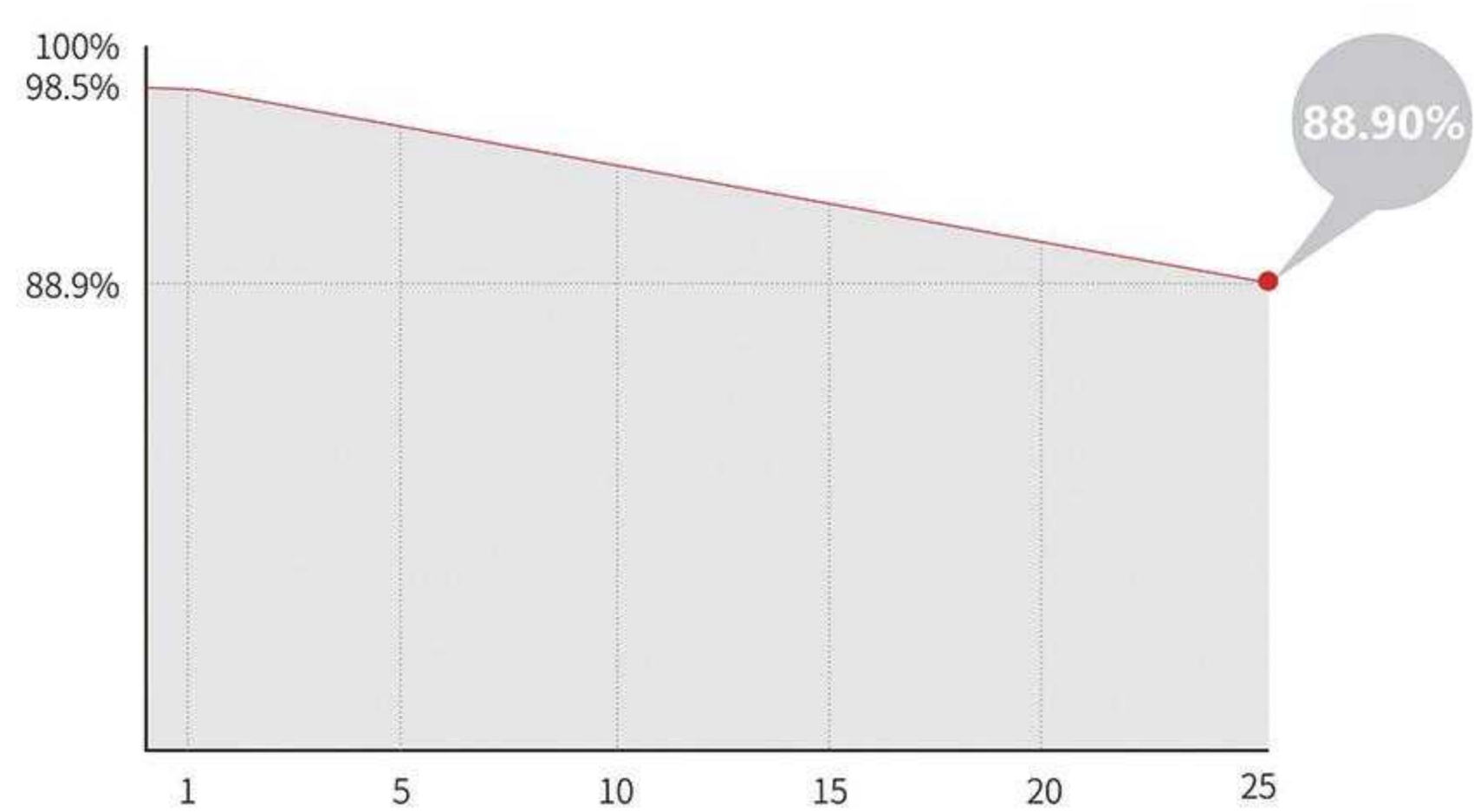
0.40%

YEAR 2-25 POWER DEGRADATION



Additional Value

25-Year Power Warranty



Mechanical Parameters

Cell Orientation	144 (6×24)
Junction Box	IP68
Output Cable	4mm², ±4000, -200mm/±1400mm length can be customized
Glass	Single glass, 3.2mm coated tempered glass
Frame	Anodized aluminum alloy frame
Weight	27.2kg
Dimension	2278×1134×30mm
Packaging	36pcs per pallet / 180pcs per 20'GP / 720pcs per 40'HC

Electrical Characteristics

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

Module Type	WR5-72HTH-565M		WR5-72HTH-570M		WR5-72HTH-575M		WR5-72HTH-580M		WR5-72HTH-585M	
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/w)	565	422	570	426	575	430	580	433	585	437
Open Circuit Voltage (Voc/v)	51.76	48.60	51.91	48.74	52.06	48.88	52.21	49.02	52.36	49.16
Short Circuit Current (Isc/A)	14.01	11.31	14.07	11.36	14.14	11.42	14.20	11.47	14.27	11.52
Voltage at Maximum Power (Vmp/V)	43.61	39.79	43.76	39.93	43.91	40.07	44.06	40.20	44.21	40.34
Current at Maximum Power (Imp/A)	12.96	10.61	13.03	10.68	13.10	10.73	13.17	10.78	13.24	10.84
Module Efficiency(%)	21.9		22.1		22.3		22.5		22.6	

Operating Parameters

Operational Temperature	-40°C ~ +85°C
Power Output Tolerance	0 ~ 3%
Voc and Isc Tolerance	±3%
Maximum System Voltage	DC1500V (IEC/UL)
Maximum Series Fuse Rating	25A
Nominal Operating Cell Temperature	45±2°C
Protection Class	Class II
Fire Rating	UL type 1 or 2 IEC Class C

Mechanical Loading

Front Side Maximum Static Loading	5400Pa
Rear Side Maximum Static Loading	2400Pa
Hailstone Test	25mm Hailstone at the speed of 23m/s

Temperature Ratings (STC)

Temperature Coefficient of Isc	+0.050%/°C
Temperature Coefficient of Voc	-0.230%/°C
Temperature Coefficient of Pmax	-0.290%/°C

HPBC

HIGH EFFICIENCY CELLS

WR5-54HTH 420~440M

-  Suitable for Distribution Market
-  Simple design embodies modern style
-  Better energy generation performance
-  High-quality module guarantees long-term reliability



15-year Warranty for Materials and Processing



25-year Warranty for Extra Linear Power Output

Complete System and Product Certifications

IEC 61215, IEC 61730, UL 61730
ISO9001:2015: ISO Quality Management System
ISO14001: 2015: ISO Environment Management System
ISO45001: 2018: Occupational Health and Safety
IEC62941: Guideline for module design qualification and type approval



22.5%

MAX MODULE EFFICIENCY

0~3%

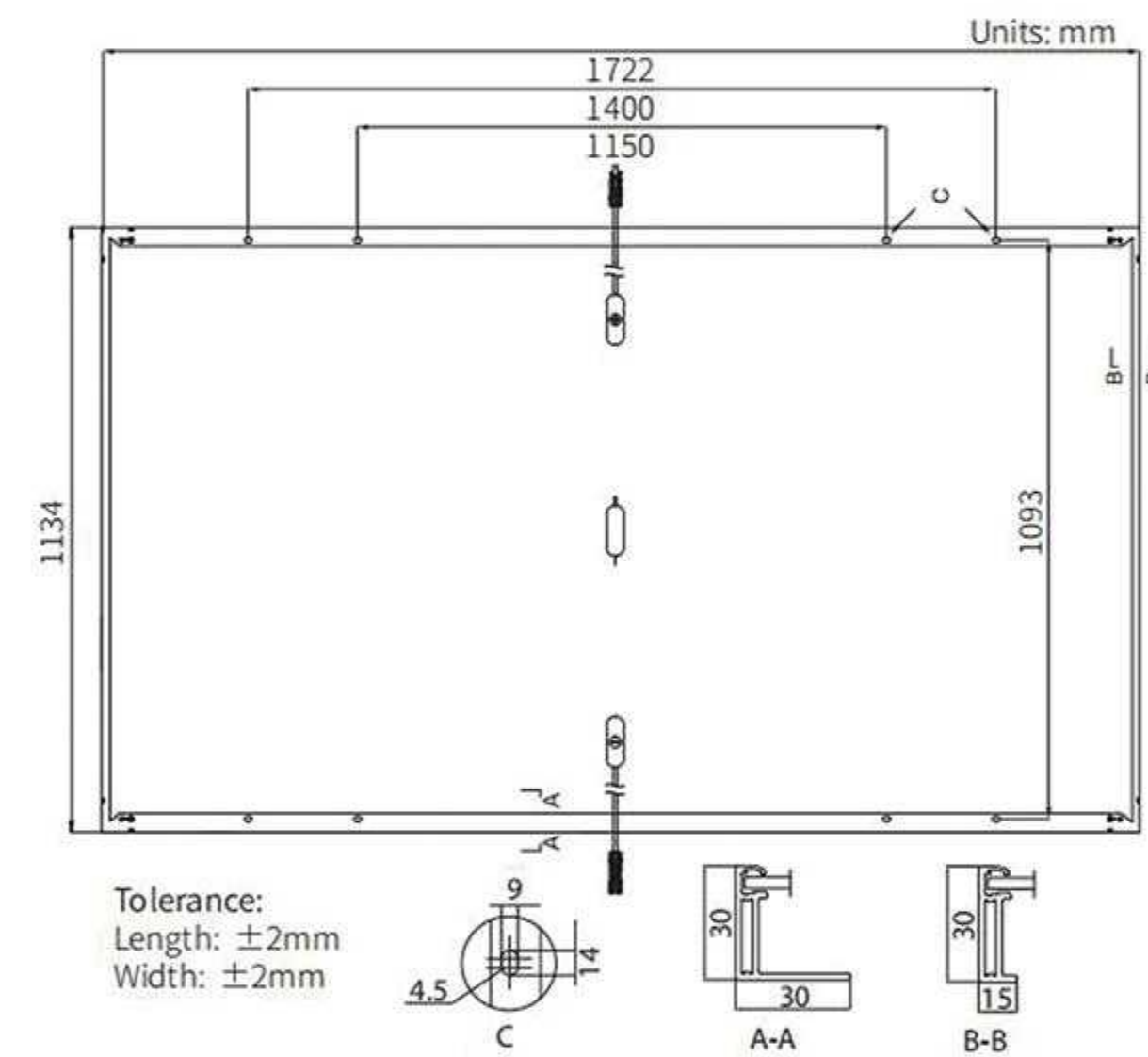
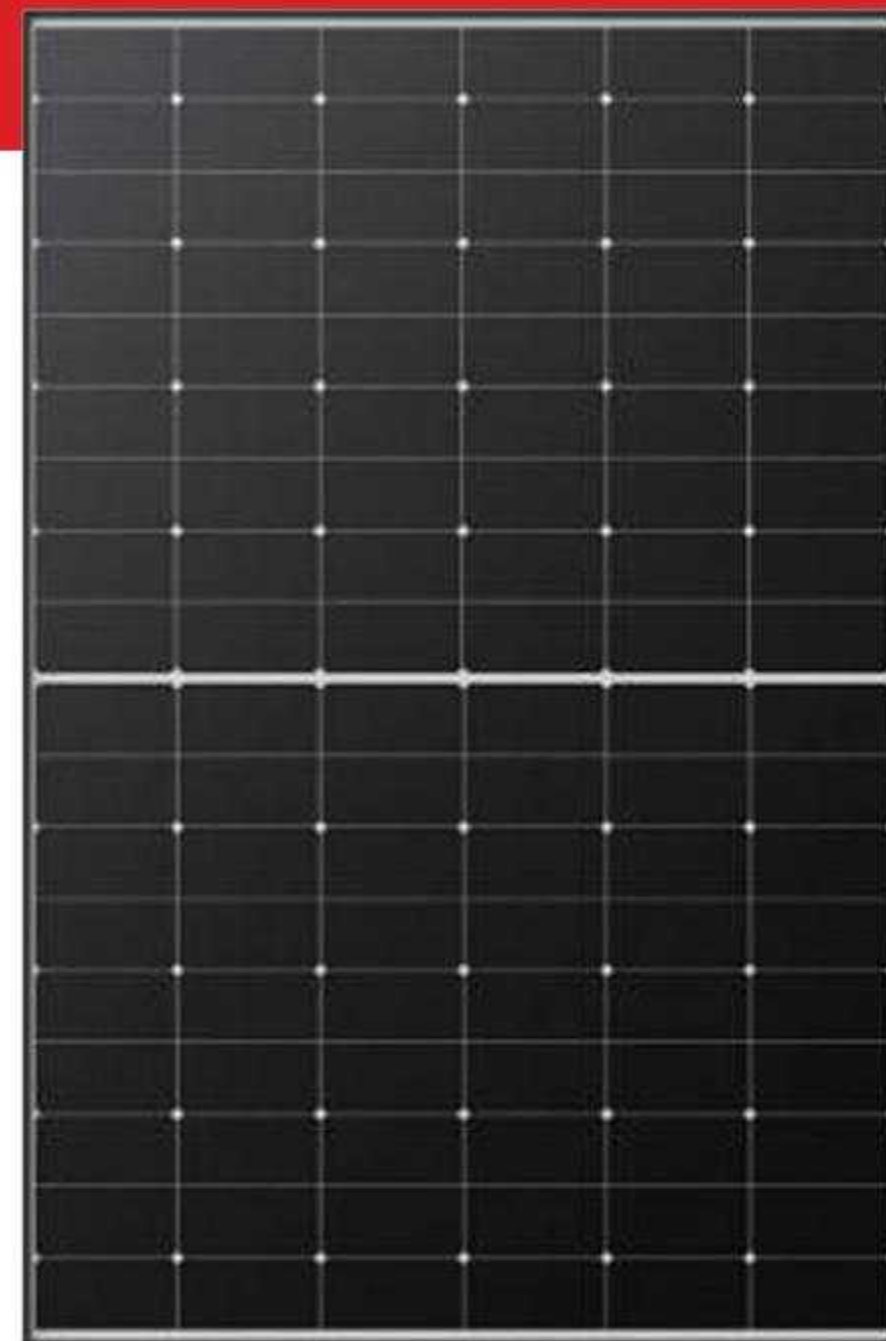
POWER TOLERANCE

<1.5%

FIRST YEAR POWER DEGRADATION

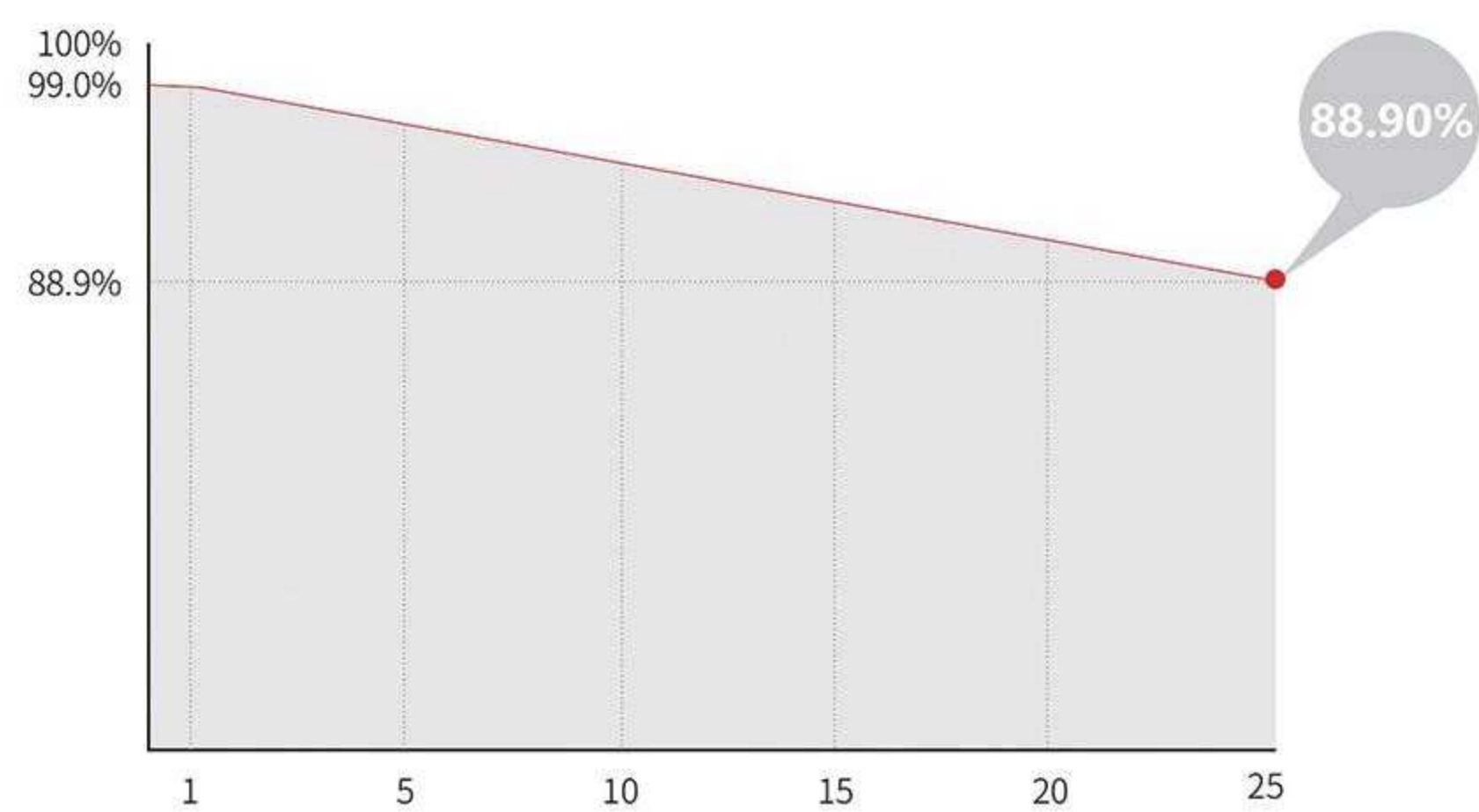
0.40%

YEAR 2-25 POWER DEGRADATION



Additional Value

25-Year Power Warranty



Mechanical Parameters

Cell Orientation	108 (6×18)
Junction Box	IP68
Output Cable	4mm², ±1200mm length can be customized
Glass	Single glass, 3.2mm coated tempered glass
Frame	Anodized aluminum alloy frame
Weight	20.8kg
Dimension	1722×1134×30mm
Packaging	36pcs per pallet / 216pcs per 20'GP / 936pcs per 40'HC

Electrical Characteristics

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

Module Type	WR5-54HTH-420M		WR5-54HTH-425M		WR5-54HTH-430M		WR5-54HTH-435M		WR5-54HTH-440M	
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/w)	420	314	425	318	430	321	435	325	440	329
Open Circuit Voltage (Voc/v)	38.73	36.36	38.93	36.55	39.13	36.74	39.33	36.93	39.53	37.11
Short Circuit Current (Isc/A)	14.00	11.31	14.07	11.36	14.15	11.43	14.22	11.49	14.30	11.55
Voltage at Maximum Power (Vmp/V)	32.44	29.60	32.64	29.78	32.84	29.97	33.04	30.15	33.24	30.33
Current at Maximum Power (Imp/A)	12.95	10.60	13.03	10.67	13.10	10.72	13.17	10.78	13.24	10.85
Module Efficiency(%)	21.5		21.8		22.0		22.3		22.5	

Operating Parameters

Operational Temperature	-40°C ~ +85°C
Power Output Tolerance	0 ~ 3%
Voc and Isc Tolerance	±3%
Maximum System Voltage	DC1500V (IEC/UL)
Maximum Series Fuse Rating	25A
Nominal Operating Cell Temperature	45±2°C
Protection Class	Class II
Fire Rating	UL type 1 or 2 IEC Class C

Mechanical Loading

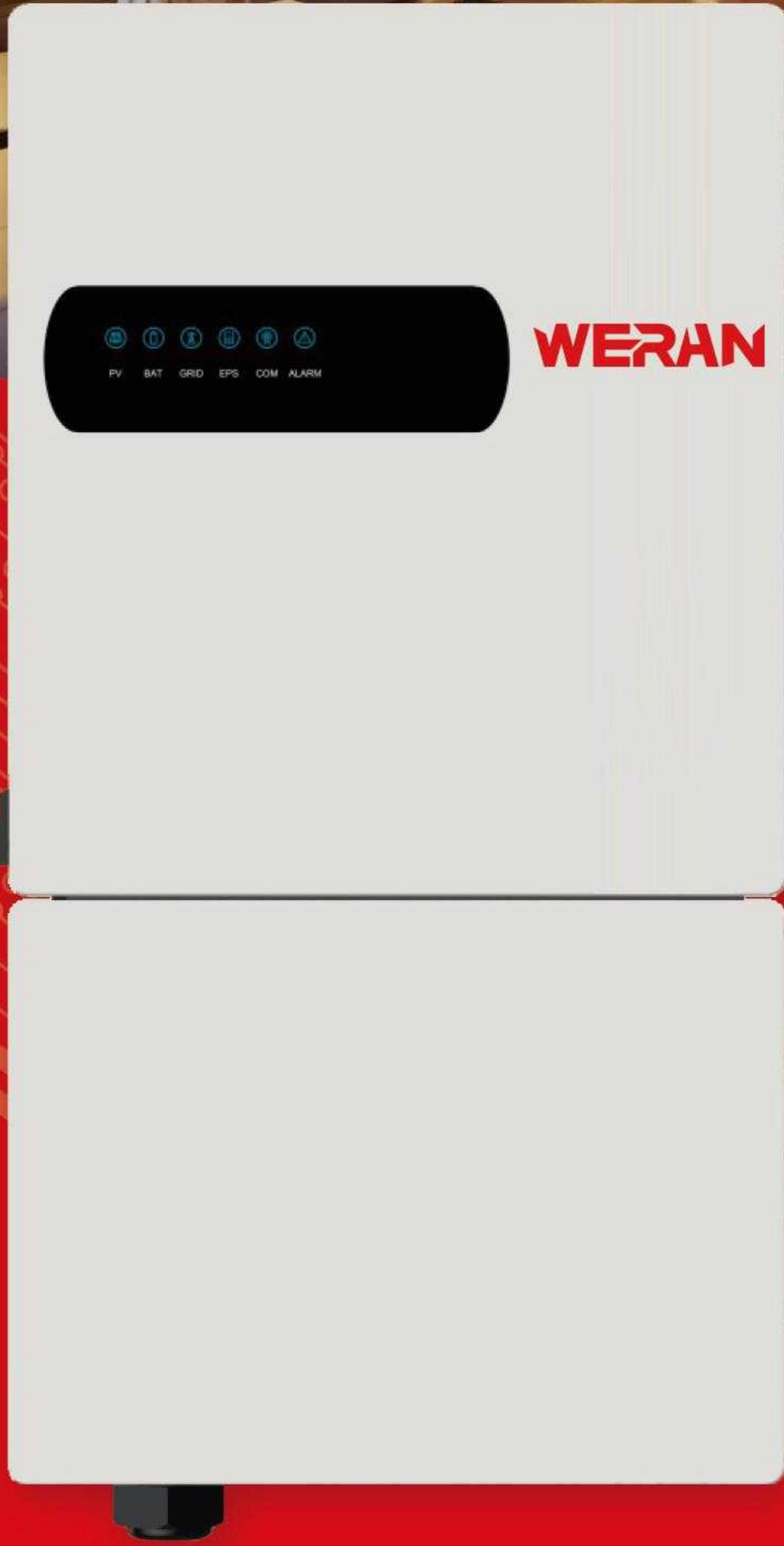
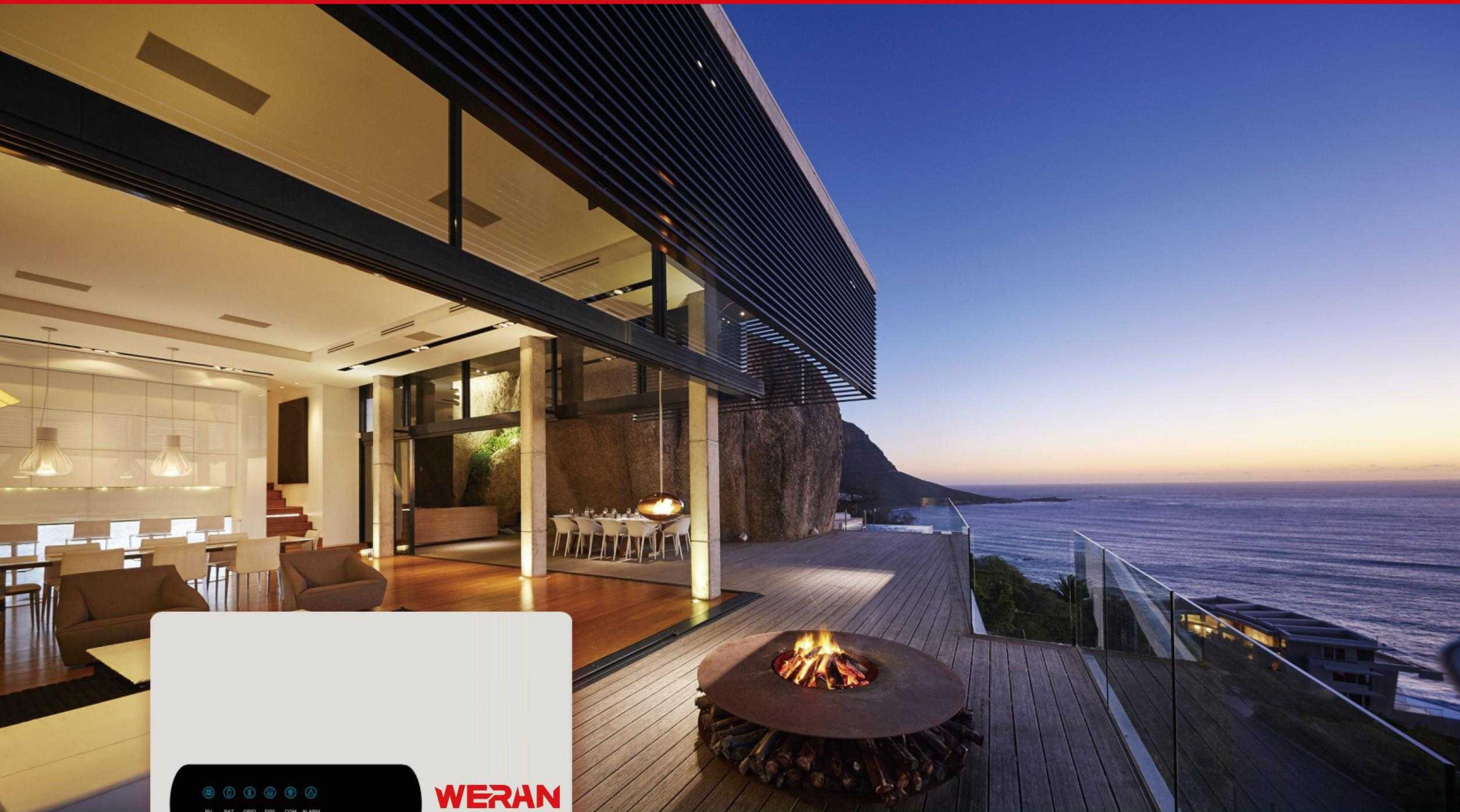
Front Side Maximum Static Loading	5400Pa
Rear Side Maximum Static Loading	2400Pa
Hailstone Test	25mm Hailstone at the speed of 23m/s

Temperature Ratings (STC)

Temperature Coefficient of Isc	+0.050%/°C
Temperature Coefficient of Voc	-0.230%/°C
Temperature Coefficient of Pmax	-0.290%/°C



Hybrid Inverter - Single Phase 8K/10K



Product Features

- Compatible with most common low-voltage batteries (lead-acid & lithium)
- Easy for cooperating with BMS; support remote upgrade for WERAN battery BMS only
- Parallel capacity is up to 9 units
- Support external remote shutdown device
- Remote upgrade and configuration, safety-related functions integrated

		WRI-8KRS	WRI-10KRS
Battery Input Data	Battery Type	Li-ion/Lead-acid	Li-ion/Lead-acid
	Nominal Battery Voltage (V)	48	48
	Battery Voltage Range (V)	40~65	40~65
	Max. Charge/Discharge Current (A)	210/180	210/210
	Max. Charge/Discharge Power (W)	10000/8000	10000/10000
PV String Input Data	Max. Array Input Power (W)	12000	15000
	Max. DC Input Voltage (V)	600	600
	Nominal DC input Voltage (V)	360	360
	Start-up Voltage (V)	90	90
	MPPT Voltage Range (V)	70~540	70~540
	Max. Input Current per MPPT(A)	30/22/22	30/22/22
	Max. Short-circuit Current per MPPT (A)	40/30/30	40/30/30
	No. Of MPPT	3	3
	No. of Strings per MPPT	2	2
AC Input Data	Nominal Input Apparent Power (VA)	8000	10000
	Max. Input Apparent Power (VA)	12000	15000
AC Output Data (on-grid)	Nominal Output Active Power (W)	8000	10000
	Nominal Output Apparent Power (VA)	8000	10000
	Max. Output Apparent Power (VA)	8800	11000
	Nominal Output Voltage (V)	220/230/240	
	Nominal Output Frequency (Hz)	50/60	
	Output Frequency Range(Hz)	45-65(Ajustable)	
	Max. Output Current (A)	40	50
	Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)	
	THDi	<3%	<3%
Back-up Output Data	Nominal Output Apparent Power (VA)	8000	10000
	Max. Output Apparent Power (VA)	8800	11000
	Nominal Output Voltage (V)	230	
	Nominal Output Frequency(Hz)	50/60	50/60
	Nominal Output Current(A)	34.8	43.5
	Transfer Time (ms)	10(typ)/20(max)	10(typ)/20(max)
	THDv @ Linear Load	<3% @ 100% R Load	
Efficiency	Max. Efficiency	98%	98%
	Battery Discharge to AC Efficiency	95%	95%
Protection	PV Reversed Polarity Protection	Yes	
	Residual Current Monitor	Yes	
	PV Over Voltage Protection	Yes	
	PV Over Current Protection	Yes	
	Anti-islanding Protection	Yes	
	DC Surge Protection	Type II	
	AC Surge Protection	Type II	
	Insulation Resistor Detector	Yes	
	Output Over Current Protection	Yes	
	Output Short Circuit Protection	Yes	
	Output Over Voltage Protection	Yes	
	Generator	Yes	
	AFCI	Optional	
	Remote Shutdown	Optional	
	Rapid Shutdown	-	
General	Operating Temperature Range (°C)	-25~60(>45°C deratina)	
	Relative Humidity	0-100%	
	Max. Operating Altitude(m)	4000	
	Cooling Method	Fan Cooling	
	User Interface	LED+APP	
	communication	RS485/CAN (for BMS), RS485, USB, DRM/RS485 (for Meter), Optional: WiFi/GPRS/LAN	
	Weight (kg)	37	
	Dimension (W*H*D mm)	420*800*240	
	Topology	Transformerless	
	Ingress Protection Rating	IP65	
	Mounting Method	Wall Bracket	



Hybrid Inverter - Single Phase 3.6K~6K



Product Features

- Compatible with most common low-voltage batteries(lead-acid & lithium)
- Max charging/discharging current up to 120A
- The typical switch time between on-grid mode and back-up mode is 10ms
- Remote upgrade and configuration; safety-related functions integrated; easy for cooperating with BMS
- IP65 protection to ensure the inverter can work under various environmental conditions
- Easily installed in the residential site

		WRI-3.6KRS	WRI-4.6KRS	WRI-5KRS	WRI-6KRS
Battery Input Data	Battery Type	Li-ion/Lead-acid	Li-ion/Lead-acid	Li-ion/Lead-acid	Li-ion/Lead-acid
	Nominal Battery Voltage (V)	48	48	48	48
	Battery Voltage Range (V)	40~65	40~65	40~65	40~65
	Max. Charge/Discharge Current(A)	60/60	120/120	120/120	120/120
PV String Input Data	Max. Charge/Discharge Power (W)	3000/3000	4600/4600	5000/5000	6000/6000
	Max. Array Input Power (W)	6300	9000	9000	9000
	Max. DC Input Voltage (V)	550	550	550	550
	Nominal DC Input Voltage (V)	360	360	360	360
	Start-up Voltage (V)	90	90	90	90
	MPPT Voltage Range (V)	70~540	70~540	70~540	70~540
	Max. Input Current per MPPT(A)	15/15	15/15	15/15	15/15
	Max. Short-circuit Current per MPPT(A)	20/20	20/20	20/20	20/20
	No. of MPPT	2	2	2	2
AC Input Data	No. of Strings per MPPT	1	1	1	1
	Nominal input Apparent Power (VA)	3600	4600	5000	6000
	Max. Input Apparent Power (VA)	6300	9000	9000	9000
	Max. Input Current(A)	29	41	41	41
AC Output Data (on-grid)	Nominal Ouput Active Power (W)	3600	4600	5000	6000
	Nominal Output Apparent Power (VA)	3600	4600	5000	6000
	Max. Output Apparent Power (VA)	3960	5060	5500	6600
	Nominal Output Voltage (V)	220/230/240	220/230/240	220/230/240	220/230/240
	Output Voltage Range (V)	150-300(Adjustable)			
	Nominal Output Frequency(Hz)	50/60			
	Output Frequency Range (Hz)	45-65(Adjustable)			
	Max. Output Current(A)	16	22	25	27.2
	Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)			
Back-up Output Data	THDi	<3%	<3%	<3%	<3%
	Nominal Output Apparent Power (VA)	3600	4600	5000	6000
	Max. Output Apparent Power (VA)	3960	5060	5500	6600
	Nominal Output Voltage (V)	230	230	230	230
	Nominal Output Frequency (Hz)	50/60	50/60	50/60	50/60
	Max. Output Current (A)	18	23	25	30
	Transfer Time (ms)	10(typ)/20(max)	10(typ)/20(max)	10(typ)/20(max)	10(typ)/20(max)
	THDv @ Linear Load	<3% @ 100% R Load			
Efficiency	Max. Efficiency	97.30%	97.30%	97.30%	97.30%
	Battery Discharge to AC Efficiency	94.30%	94.30%	94.30%	94.30%
Protection	PV Reversed Polarity Protection	Yes			
	Residual Current Monitor	Yes			
	PV Over Voltage Protection	Yes			
	PV Over Current Protection	Yes			
	Anti-islanding Protection	Yes			
	DC Surge Protection	Type III			
	AC Surge Protection	Type III			
	Insulation Resistor Detector	Yes			
	Output Over Current Protection	Yes			
	Output Short Circuit Protection	Yes			
General	Output Over Voltage Protection	Yes			
	Operating Temperature Range (°C)	-25~60(>45°C deratina)			
	Relative Humidity	0-100%			
	Max. Operating Altitude (m)	4000			
	Cooling Method	Natural Cooling			
	User Interface	LED+APP			
	Communication	RS485/CAN (for BMS), RS485, USB, DRM/RS485 (for Meter), Optional: WiFi/GPRS/LAN			
	Weight (kg)	20	25	25	25
	Dimension (W*H*D mm)	515*485*175			
	Topology	Transformerless			
	Ingress Protection Rating	IP65			
	Mounting Method	Wall Bracket			



Portable Off-Grid Inverter E700, E1200



Product Features

- Particularly wonderful outlook and relatively convenient design
- Compatible with common 24V lithium batteries
- Support maximum 500W solar input to charge the battery or offer load power
- Bidirectional DC-AC usages (provide AC power to AC loads or charge the battery from the grid)
- Highly integrated USB-A, USB-C, as well as AC ports
- Support UPS function (transfer time <20ms)
- Thoughtful design with anti-slip rubber pads on the bottom

Portable Device

		WRI-E700	WRI-E1200
Input Data	Battery Type	Li-ion	Li-ion
	Nominal Battery Voltage (V)	24	24
	Battery Voltage Range (V)	22-28.8	22-28.8
	Max. Charge/Discharge Current (A)	20(Grid)+20(PV)/30	40(Grid)+20(PV)/52
	Nominal Pv Input Voltage (V)	27	27
	PV Input Voltage Range (V)	24-32	24-32
	Nominal PV Input Current (A)	15	15
	Max. PV Input Current (A)	20	20
	Nominal PV Input Power (W)	405	405
	Max.PV Input Power (VV)	500	500
	Nominal input Ac Voltage From The Grid (V)	160-276 @50Hz/60Hz	160-276 @50Hz/60Hz
	Max. AC Input Power From The Grid (W)	600	900
	Max. AC Input Current From The Grid (A)	6	13
Output Data	USB-C(2 ports)	5V-3A,9V-3A,12V-2.25A 3.3~11V-3A,20V-2.25A, Max.output power 45W per port	5V-3A,9V-3A,12V-2.25A 3.3~11V-3A,20V-2.25A, Max.output power 45W per port
	USB-A QC (2 ports)	5V=3A,9V=2A,12V=1.5A(Nominal), Max.output power 18W per port	5V=3A,9V=2A,12V=1.5A(Nominal), Max.output power 18W per port
	AC Output (2 ports)	Pure Sine Wave, 700W, 220Vac-240Vac @50Hz/60Hz	Pure Sine Wave, 1200W, 220Vac-240Vac @50Hz/60Hz
UPS Mode	Transfer Time	10ms@100% R load	
General	Operating Temperature Range(°C)	-20-50	
	Storage Temperature Range (°C)	-20~60	
	User Interface	Button+LED	
	Weight (kg)	2.1	2.6
	Dimension (W*H*D mm)	275*93*196	330*93*196



The Portable Off-Grid Inverter can be used with
Multi-purpose LFP Battery



Residential Rack-mounted Battery 5000



Product Features

- High Security**

 - High safety LFP cell selected, UL9540A certificated
 - Active protection design, ensure battery running under safety condition
- Efficiency**

 - Vertical integration BMS & Inverter protocol, one platform to see system message
 - <430mm depth and light weight, more compact and space saved
 - KISS principle, plug & play
- Economic**

 - >6000 cycles with >80% EOL, achieve more benefits;
 - LCOE lower 2~8%, shorter payback period

WRL-5000	
Contents	Technical Data
Product Type	WRL-5000
System Energy (Wh)*	5120
Usable Energy (Wh)*	5000
DOD Recommended	95% On Grid, 80% Off Grid
Cell Type	LFP
Nominal Voltage (V)	51.2
Working Voltage Range (V)	48~56.8
Nominal Dis-/ Charge Current (A)**	60
Max. Charge Current (A)	95
Peak Current	100A@3s
Nominal Power (W)**	3000
Max. Power (W)	5000
Peak Power (only discharge)	6000W@3s
Max. Connection No. in Parallel	16
Communication	CAN, RS 485
Dimension (W*H*D mm)	442*133*430
Weight (kg)	<46
Ingress Protection Rating	IP20
Relative Humidity	0~95%RH(no condensed water)
Max. Operating Altitude(m)	<4000m(>2000m power derating)
Cycle Life	6000,>80% EOL
Mounted Method	Wall Mounted, bracket, cabinet

* : Test conditions, cell Voltage 2.5-3.65v, 0.5C charge & discharge at +25±2℃ for battery system at beginning life. System Usable Energy may vary with different Inverter.

** : Nominal Dis-/Charge Current and power derating will occur related to Temperature and SOC

WRL - 600

600W | 500WH

FAST CHARGE

Fast charging
full charge only

1.6h

COMPACT AND LIGHT

Easy to carry
weight only

5KG

HIGH SOLAR

Meets the EN50530
standard

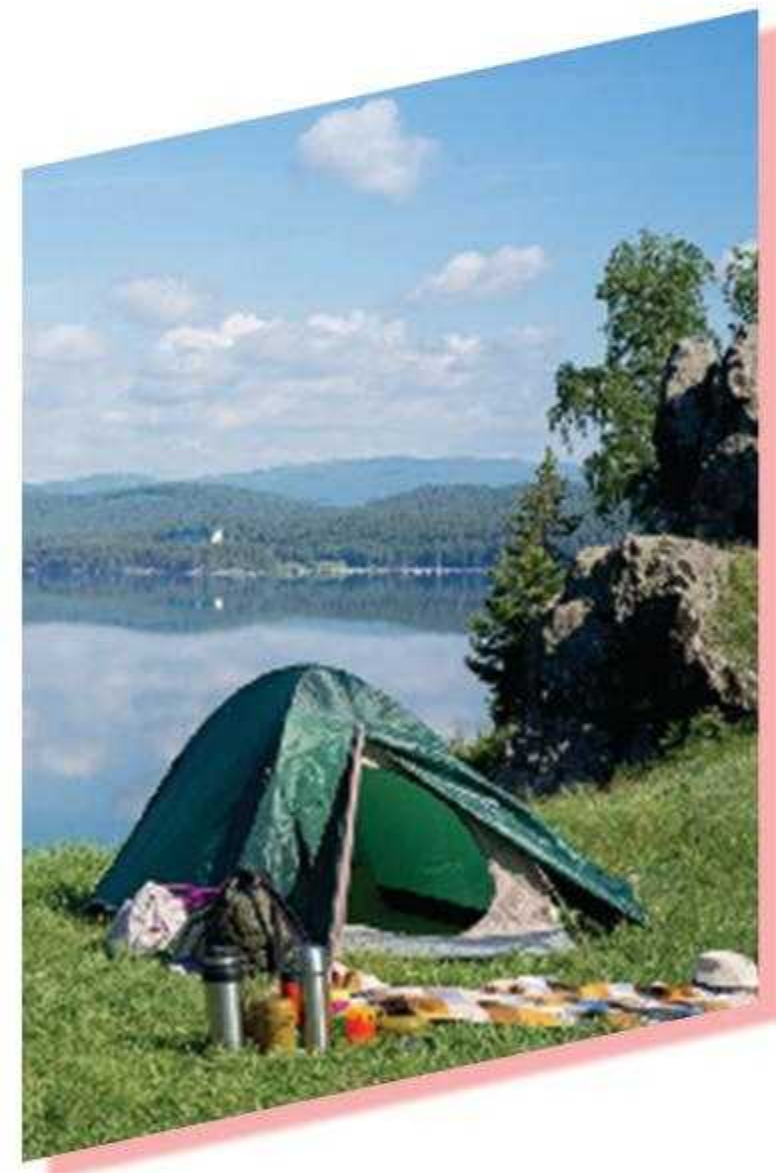
100W

X-BOOST

Small size
high power

1200W

WRL-600 is an outdoor portable power supply pursuing the ultimate lightweight, which can realize the peak output power of 1200W. Meanwhile, it has 2-channel USB-A output and 2-channel USB-C output, supporting 100W photovoltaic charging and providing power and convenience for outdoor activities.



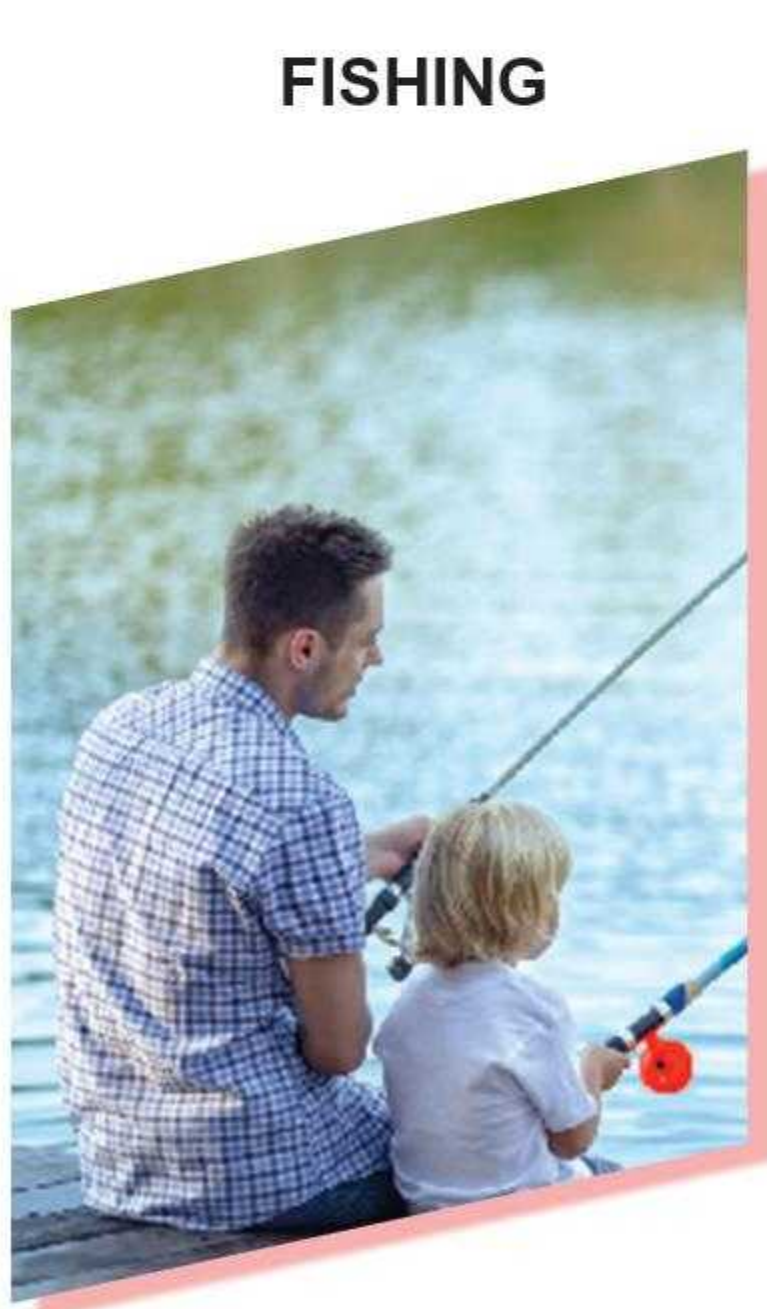
CAMPING



TOOLS



SHOOT



FISHING



UL Professional Certification

1000+ depth charge and discharge

Higher battery cycle life

BMS intelligent management system

16 double safety protection

High temperature/low temperature/low pressure/
overload/short circuit/overvoltage/overcurrent

High Temperature Protection

Low Temperature Protection

Overdischarge Protection

Overload Protection

Short circuit Protection

Overvoltage Protection

Overcurrent Protection

Battery Protection

Battery

Cell Chemistry	NCM
Capacity	499.5Wh
Lifecycle	1000 (Times)

Input

AC Input	400W Max
PV Input	100W Max, 10-22VDC, 6.5A

Output

AC Output	Rated Power 600W (lift drive 1200W)
Car Power Output	132W, 13.2V/10A
USB-A * 2 USB Port A * 2	5-12V/3A, 36W Max
USB-C * 2 USB - C port * 2	5-20V/3A, 60W Max

General

Dimensions (LxWxD)	251*145*152mm
Weight	5.1kg
Operating UsageTemperature	Discharge Temp: -10~40°C Charging Temp: 0 ~ 40 °C
Operating Altitude	Below 2000m
Noise	41dB

WRL - 1200

1200W | 1000WH





FAST CHARGE
Fully charged
1.6H



COMPACT AND LIGHT
weight
9.5KG



HIGH SOLAR
input
200W

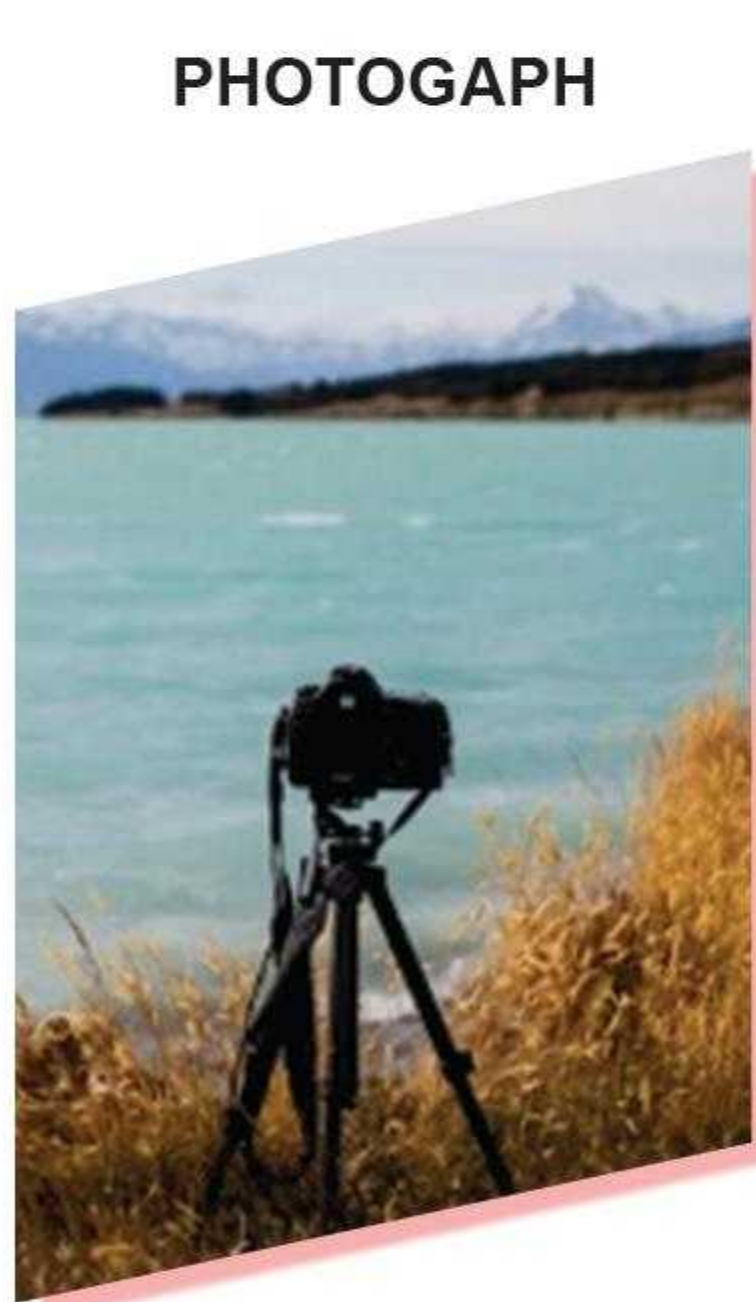


X-BOOST
support
2400W

WRL-1200 is an outdoor portable power supply with balanced application. It has a built-in 1kw power supply but only weighs 9.5kg. Meanwhile, it ensures 1200W output power and 2400W maintenance drive, which can drive almost all outdoor electrical appliances. Equipped with 200W photovoltaic charging, it really realizes the power consumption without worry.



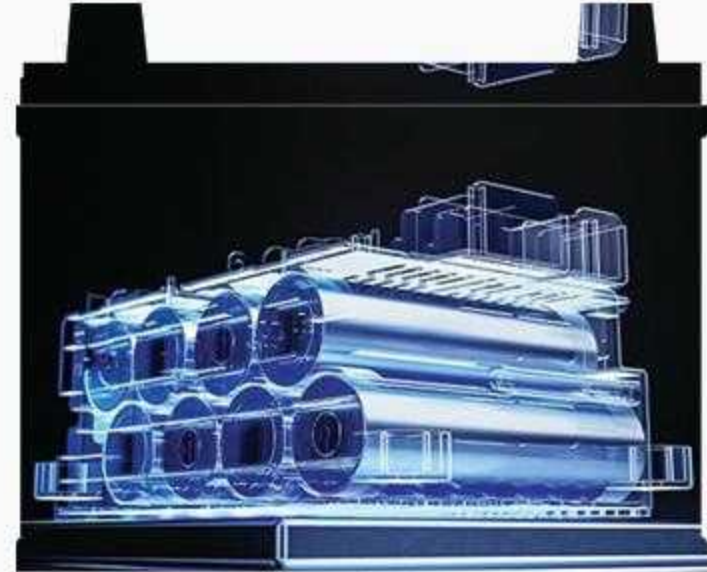
TRIPS



EMERGENCY



UL Professional Certification
1000+ depth charge and discharge
Higher battery cycle life



BMS intelligent management system
16 double safety protection
High temperature/low temperature/low pressure/
overload/short circuit/overvoltage/overcurrent



High Temperature Protection



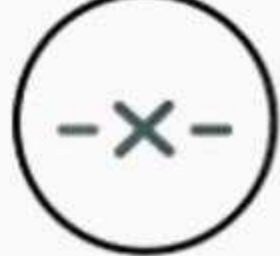
Low Temperature Protection



Overdischarge Protection



Overload Protection



Short circuit Protection



Overvoltage Protection



Overcurrent Protection



Battery Protection

Battery

Cell Chemistry	NCM
Capacity	999Wh
Lifecycle	1000TS (Times)

Input

AC Input	1000W Max
PV Input	200W Max, 10-24VDC, 12A

Output

AC Output	Rated Power 1200W (lift drive 2400W)
Car Power Output	132W, 13.2V/10A
USB-A * 2 USB Port A * 2	5V/3A, 9V/2.6A, 12V/2A, 24W Max
USB-C * 2 USB - C port * 2	5-15V/3A, 20V/5A, 100W Max

General

Dimensions (LxWxD)	300*215*195mm
Weight	9.5kg
Operating UsageTemperature	Discharge Temp: -10~40°C Charging Temp: 0 ~ 40 °C
Operating Altitude	Below 2000m
Noise	41dB

WRL - 1500

1500W | 1600WH





LOW TEMPERATURE

Electric discharge

-20°C~40°C



LFP

Loop

3500TS



HIGH SOLAR

Fully charged

2H



HOME BACKUP

Toggle

20MS

WRL-1500 is an outdoor portable power supply with built-in lithium iron phosphate battery. With built-in 1.6°C power supply, it only takes 2 hours for PV to be fully charged. Meanwhile, it supports 20 ms of UPS standby power for non-sensitive switching. It can still work normally under 20°C environment, making mobile power more secure and lasting.



EMERGENCY



PARTY



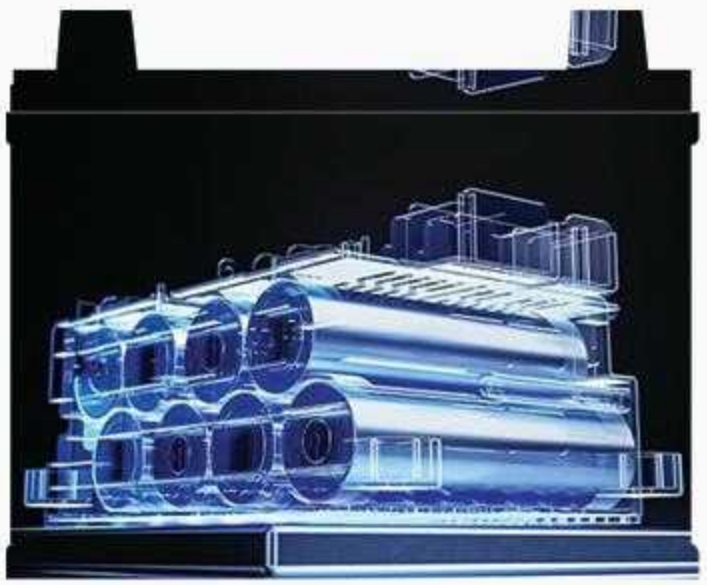
CAMPING



DIY



UL Professional Certification
1000+ depth charge and discharge
Higher battery cycle life



BMS intelligent management system
16 double safety protection
High temperature/low temperature/low pressure/
overload/short circuit/overvoltage/overcurrent



High Temperature Protection



Low Temperature Protection



Overdischarge Protection



Overload Protection



Short circuit Protection



Overvoltage Protection



Overcurrent Protection



Battery Protection

Battery

Cell Chemistry	LFP
Capacity	1612Wh
Lifecycle	3500TS (Times)

Output

AC Output	Rated Power 1500W (peak power 3000W)
Bypass Output	1800W Max
Car Power Output	132W, 13.2V/10A
USB-A * 2 USB Port A * 2	5V/3A, 9V/2.6A, 12V/2A, 24W Max
USB-C * 2 USB - C port * 2	5-15V/3A, 20V/5A, 100W Max

Input

AC Input	1200W Max
PV Input	800W Max, 10-95VDC, 12A

General

Dimensions (LxWxD)	300*215*245mm
Weight	15kg
Operating UsageTemperature	Discharge Temp: -20 ~ 40°C Charging Temp: -10 ~ 40 °C
Operating Altitude	Below 2000m
Noise	41dB

WRL - 2200

2200W | 2200WH

FAST CHARGE
Fully charged
1.6h

MORE ELECTRICITY
electricity
2.2

HIGH SOLAR
input
800W

HIGH POWER
exportation
2200W

WIRELESS CHARGE
15W

WRL-2200 is a mobile power supply with strong performance and wide application. It has a built-in 2.2 degree of electricity, reaching 2200W high power output power. Meanwhile, it is equipped with 800W ultra-high photovoltaic charging, which is an excellent partner for outdoor activities and household power backup.



RV travel

TOOLS



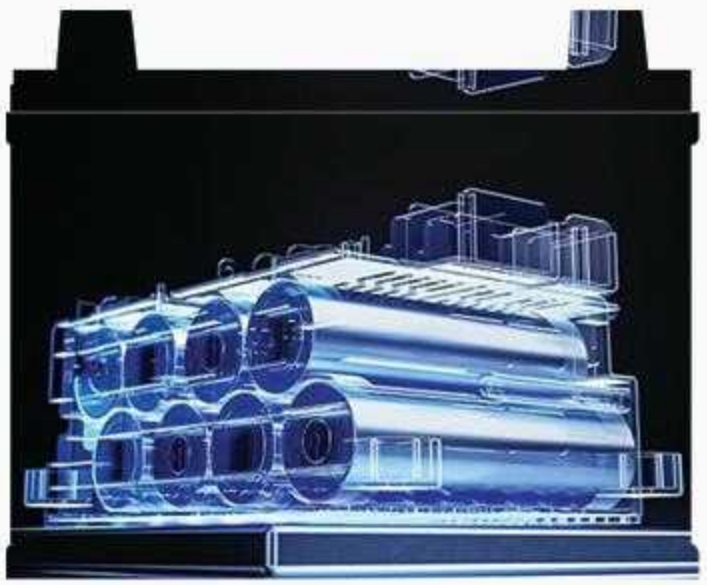
STANDBY



OFF-GRID



UL Professional Certification
1000+ depth charge and discharge
Higher battery cycle life



BMS intelligent management system
16 double safety protection
High temperature/low temperature/low pressure/
overload/short circuit/overvoltage/overcurrent

- High Temperature Protection
- Low Temperature Protection
- Overdischarge Protection
- Overload Protection
- Short circuit Protection
- Overvoltage Protection
- Overcurrent Protection
- Battery Protection

Battery

Cell Chemistry	NCM
Capacity	2203Wh
Lifecycle	1000TS (Times)

Output

AC Output*4	Rated Power 2200W (peak power 3000W)
Car Power Output	132W, 12V/10A
DC 5521 Output*2	132W, 13.2V/5A
USB-A * 4 USB Port A * 4	5V/3A, 9V/2.6A, 12V/2A, 24W Max
USB-C * 2 USB - C port * 2	5-15V/3A, 20V/5A, 100W Max
Wireless Charging	5V/1A, 12V/1.25A, 15W Max

Input

AC Input	1800W Max
PV Input	Max total 800W, max 400W per channel, 11-46VDC, 12A

General

Dimensions (LxWxD)	420*288*303mm
Weight	21kg
Operating UsageTemperature	Discharge Temp: -10~40°C Charging Temp: 0 ~ 40 °C
Operating Altitude	Below 2000m
Noise	41dB



12V & 24V Li-ion Battery



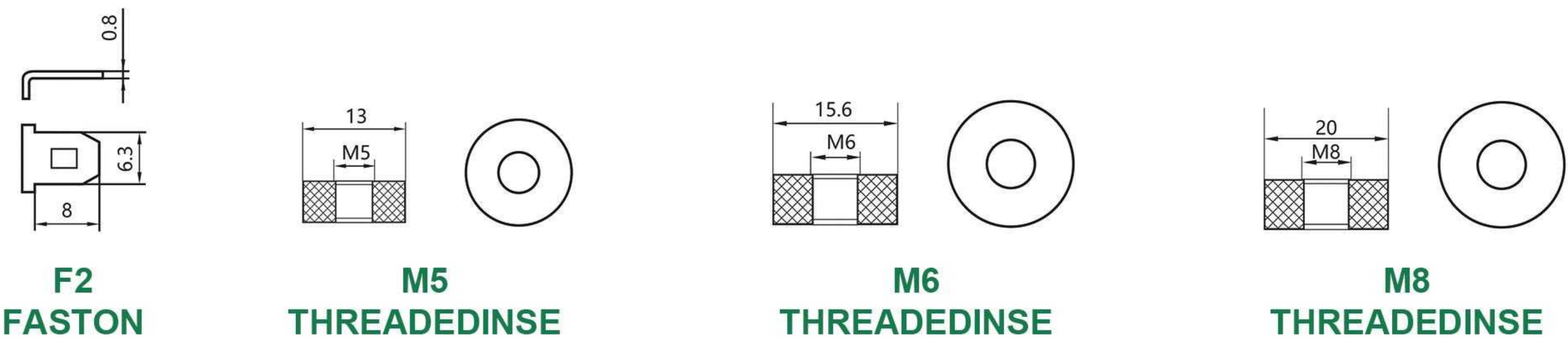
Product Features

Safe & Reliable	Self-manufactured prismatic Li-ion cell and pack
Long Lifespan	Max 6000 cycles along with 15 Years design life
Robust BMS	Support in series and parallel, high compatibility
Optional Function	Optional LCD/ Bluetooth/Heating device, along with APP
All-round Protection	Over charge, Over discharge, Over current, Over temp, Short, Balance
Customized Design	Customized logo, pattern, color, capacity, and dismountable screw

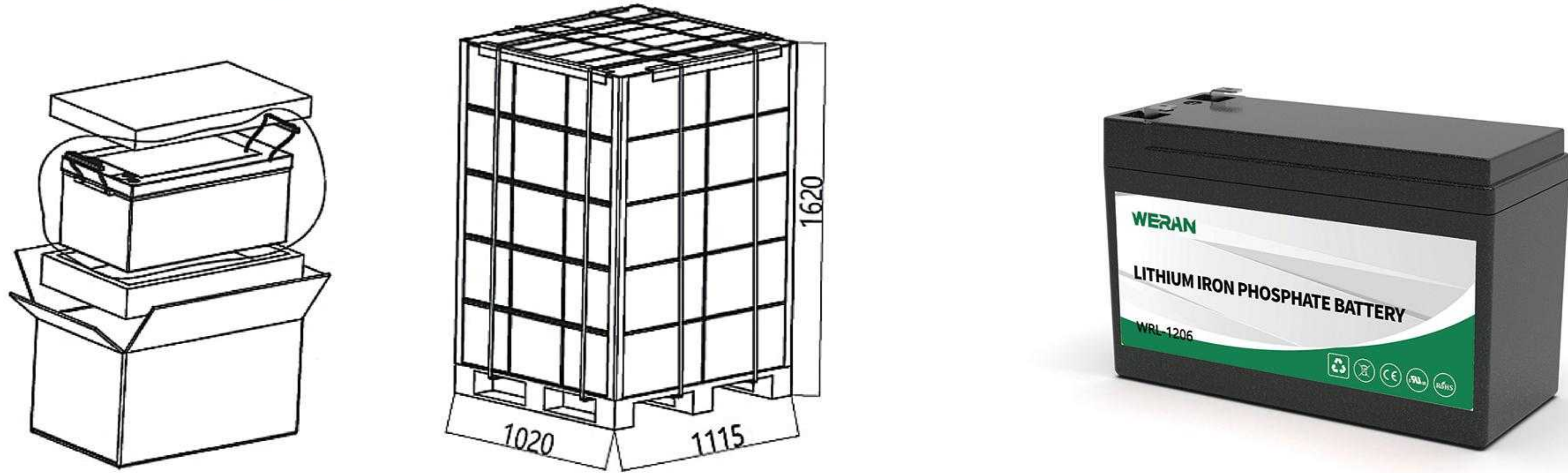
Technical Advantages

Use in Serial/Parallel Directly	Within 4 batteries in serial,it can be used in serial and parallel like lead-acid batteries
Balancing sensing capability	Ensure the consistency of the cell inside the module,and consistency of modules during in serial and parallel.
Excellent over-current capability	Max continuous 400A charge and discharge current
Bluetooth monitoring	Built-in Bluetooth,can monitor the battery status in realtime by connecting the APP
All process tracking	Independently developed MES system,which can track test data and component information during battery production

Battery Terminal



Battery Packaging



No.	Model	Votage	Capacity	Dimension L*W*H	Terminal	Weight
1	WRL-1206	12.8V	6Ah	151*65*94mm	F2	0.7 Kg
2	WRL-1208	12.8V	8Ah	151*65*94mm	F2	0.95 Kg
3	WRL-1210	12.8V	10Ah	151*65*94mm	F2	1.03 Kg
4	WRL-1212S	12.8V	12Ah	151*98*95mm	F2	1.45 Kg
5	WRL-1220	12.8V	20Ah	181*77*167mm	M5	2.1 Kg
6	WRL-1246	12.8V	46Ah	197*132*170mm	M6	4.2 Kg
7	WRL-1250S	12.8V	50Ah	197*166*170mm	M6	5.8 Kg
8	WRL-1250	12.8V	50Ah	229*144*208 mm	M6	6.2 Kg
9	WRL-12100	12.8V	100Ah	260*170*210 mm	M8	9.7 Kg
10	WRL-12100S1	12.8V	100Ah	306*168*216 mm	M8	9.9 Kg
11	WRL-12100S2	12.8V	100Ah	330*172*215 mm	M8	10 Kg
12	WRL-12105	12.8V	105Ah	260*170*210 mm	M8	10 Kg
13	WRL-12105S1	12.8V	105Ah	306*168*216 mm	M8	10.2Kg
14	WRL-12105S2	12.8V	105Ah	330*172*215 mm	M8	10.6 Kg
15	WRL-12150	12.8V	150Ah	330*172*215 mm	M8	13.7 Kg
16	WRL-12200	12.8V	200Ah	502*186*240 mm	M8	18.8 Kg
17	WRL-12200S	12.8V	200Ah	383*205*268 mm	M8	19.7 Kg
18	WRL-12300	12.8V	300Ah	521*268*218 mm	M8	28 Kg
19	WRL-12300S	12.8V	300Ah	383*205*268 mm	M8	28 Kg
20	WRL-12400	12.8V	400Ah	521*268*218 mm	M8	38 Kg
21	WRL-2450S2	25.6V	50Ah	330*172*215 mm	M8	11.3 Kg
22	WRL-24100	25.6V	100Ah	502*186*240 mm	M8	18.8 Kg
23	WRL-24200	25.6V	200Ah	521*268*218 mm	M8	37.9 Kg
24	WRL-48100	51.2V	100Ah	521*268*218 mm	M8	41 Kg