



LYBESS Solar Panel Product Collection



Get to know us

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400-500W Series Solar Panels

PNG Solar HALF-CELL MBB MONO PERC



PNG-108M(182)
400-420 Watt

Features:

- Multi Busbar Solar Cell:** Stronger current collection ability, Special circuit design with much lower hot spot temperature.
- PID Resistant:** Excellent PID resistance at 96 hours (85°C/85%) test, and also can be improved to meet higher standards for the particularity.
- Module efficiency up to 21.53%:** Half cell structure brings low resistance characteristic, higher lifetime generating capacity. simultaneously lower annual power attenuation.
- Anti-Crack:** Excellent anti-microcracking performance with more balanced interior stress.
- Low-Light Performance:** Excellent power generation performance under Low-Light condition due to multi busbar; better shading response benefit from half cell module.
- Strength and Durability:** Certified for 5400Pa snow and 2400Pa Wind loads test.

Electrical Specifications

Module Type	PNG108M-400		PNG108M-405		PNG108M-410		PNG108M-415		PNG108M-420	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Max. Power (Pmax/W)	400	301	405	305	410	309	415	313	420	317
Voltage at Max. Power (Vmp/V)	31.1	29.2	31.2	29.4	31.4	29.6	31.6	29.8	31.8	30.0
Current at Max. Power (Imp/A)	12.88	10.31	12.97	10.38	13.05	10.45	13.12	10.52	13.19	10.59
Open circuit voltage (Voc/V)	37.1	34.9	37.2	35.1	37.4	35.3	37.6	35.5	37.8	35.7
Short circuit current (Isc/A)	13.77	11.01	13.86	11.10	13.95	11.17	14.04	11.26	14.13	11.34
Module efficiency (%)	20.50		20.76		21.01		21.27		21.53	
Power Tolerance (W)	0 ~ +5									

Standard Test Condition(STC): Irradiance 1000W/m², Cell Temperature 25°C, AM1.5.

Nominal Module Operating Temperature(NOCT): Irradiance 800W/m², Ambient Temperature 20°C, AM1.5, Wind Speed 1m/s.

Mechanical Specifications

Cell Type	MBB MONO 182*91mm
No. of Cells	108(6*18)
Dimension	1722*1134*30mm
Weight	21.5kg
Glass	3.2mm, Low Iron Tempered Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68, 3 diodes
Output Cables	4mm ² , Length 300mm or customized
Connector type	MC4 compatible

Packaging Configurations

Per Pallet	36 pcs
Per 40' HQ Container	936 pcs

Linear Performance Warranty

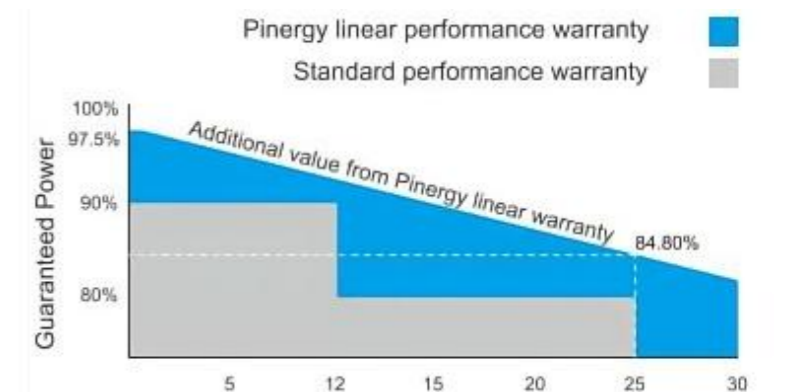
12 Years Product Warranty • 30 Years Linear Power Warranty

Temperature Characteristics

NOCT Temperature	44°C±2°C
Temperature Coefficient (Pmax)	-0.36%/°C
Temperature Coefficient (Voc)	-0.28%/°C
Temperature Coefficient (Isc)	0.05%/°C

Maximum Ratings

Maximum system voltage(IEC)	1500V DC
Snow / Wind	5400Pa / 2400Pa
Operating Temperature	-40°C ~ +85°C
Maximum series fuse rating	20A



PNG Solar HALF-CELL MBB MONO PERC



PNG-144M(166)
440-460 Watt

Features:

- Multi Busbar Solar Cell:** Stronger current collection ability, Special circuit design with much lower hot spot temperature.
- PID Resistant:** Excellent PID resistance at 96 hours (85°C/85%) test, and also can be improved to meet higher standards for the particularly harsh environment.
- Module efficiency up to 21.16%:** Half cell structure brings low resistance characteristic, higher lifetime generating capacity. simultaneously lower annual power attenuation.
- Anti-Crack:** Excellent anti-microcracking performance with more balanced interior stress.
- Low-Light Performance:** Excellent power generation performance under Low-Light condition due to multi busbar; better shading response benefit from half cell module.
- Strength and Durability:** Certified for 5400Pa snow and 2400Pa Wind loads test.

Electrical Specifications

Module Type	PNG144M-440		PNG144M-445		PNG144M-450		PNG144M-455		PNG144M-460	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Max. Power (Pmax/W)	440	330	445	334	450	338	455	341	460	345
Voltage at Max. Power (Vmp/V)	40.9	38.0	41.1	38.2	41.3	38.4	41.5	38.6	41.7	38.8
Current at Max. Power (Imp/A)	10.76	8.66	10.83	8.73	10.90	8.79	10.97	8.83	11.03	8.89
Open circuit voltage (Voc/V)	49.8	45.6	50.0	45.8	50.2	46.0	50.4	46.2	50.6	46.4
Short circuit current (Isc/A)	11.29	9.31	11.33	9.38	11.41	9.44	11.48	9.48	11.58	9.55
Module efficiency (%)	20.24		20.47		20.70		20.93		21.16	
Power Tolerance (W)	0 ~ +5									

Standard Test Condition(STC): Irradiance 1000W/m², Cell Temperature 25°C, AM1.5.

Nominal Module Operating Temperature(NOCT): Irradiance 800W/m², Ambient Temperature 20°C, AM1.5, Wind Speed 1m/s.

Mechanical Specifications

Cell Type	9BB MONO 166*83mm
No. of Cells	144(6*24)
Dimension	2094*1038*35mm
Weight	24.5kg
Glass	3.2mm, Low Iron Tempered Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68, 3 diodes
Output Cables	4mm ² , Length 300mm or customized
Connector type	MC4 compatible

Packaging Configurations

Per Pallet	31 pcs
Per 40' HQ Container	682 pcs

Linear Performance Warranty

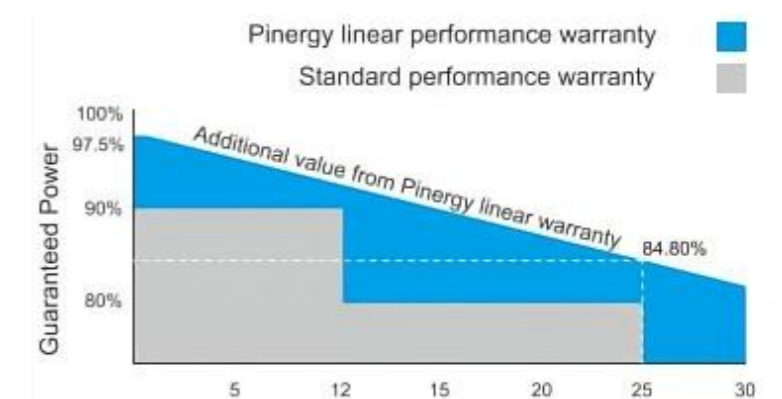
12 Years Product Warranty • 30 Years Linear Power Warranty

Temperature Characteristics

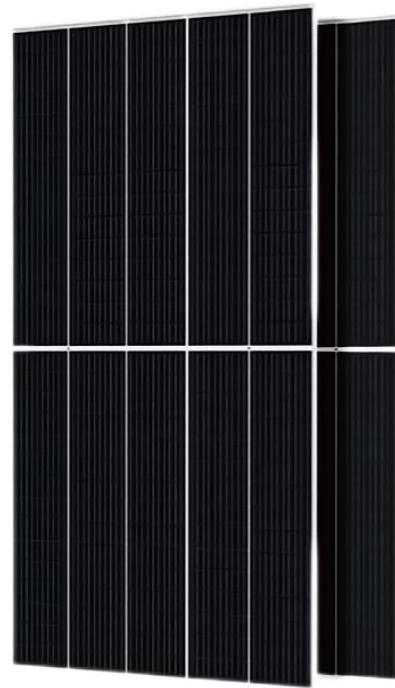
NOCT Temperature	44°C±2°C
Temperature Coefficient (Pmax)	-0.36%/°C
Temperature Coefficient (Voc)	-0.28%/°C
Temperature Coefficient (Isc)	0.05%/°C

Maximum Ratings

Maximum system voltage(IEC)	1500V DC
Snow / Wind	5400Pa / 2400Pa
Operating Temperature	-40°C ~ +85°C
Maximum series fuse rating	20A



PNG Solar 1/3-CELL MBB MONO PERC



PNG-150M(210)
490-510 Watt

Features:

- ❏ **IP68 junction box, connector:** IP68 junction box and connector have a high degree of waterproof effectively resist the harsh environment.
- ❏ **PID Resistant:** Excellent PID resistance at 96 hours (85°C/85%) test, and also can be improved to meet higher standards for the particularly harsh environment.
- ❏ **MBB half-cut cell technology:** New circuit design, lower internal current, lower Rs loss.
- ❏ **Significantly lower the risk of hot spot:** Special circuit design with much lower hot spot temperature.
- ❏ **Lower LCOE:** 2% more power generation, lower LCOE.

Electrical Specifications

Module Type	PNG150M-490		PNG150M-495		PNG150M-500		PNG150M-505		PNG150M-510	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Max. Power (Pmax/W)	490	361	495	365	500	369	505	372	510	376
Voltage at Max. Power (Vmp/V)	42.5	39.7	42.7	39.9	42.9	40.1	43.1	40.2	43.3	40.4
Current at Max. Power (Imp/A)	11.53	9.09	11.59	9.15	11.66	9.20	11.72	9.25	11.78	9.31
Open circuit voltage (Voc/V)	51.2	47.8	51.4	48.0	51.6	48.2	51.8	48.3	52.0	48.5
Short circuit current (Isc/A)	12.17	9.79	12.24	9.85	12.31	9.91	12.38	9.96	12.45	10.03
Module efficiency	20.12		20.33		20.53		20.74		20.94	
Power Tolerance (W)	0 ~ +5									

Standard Test Condition(STC): Irradiance 1000W/m², Cell Temperature 25°C, AM1.5.

Nominal Module Operating Temperature(NOCT): Irradiance 800W/m², Ambient Temperature 20°C, AM1.5, Wind Speed 1m/s.

Mechanical Specifications

Cell Type	10BB MONO 210*210mm
No. of Cells	150(5*30)
Dimension	2214*1100*35mm
Weight	28kg
Glass	3.2mm, Low Iron Tempered Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68, 3 diodes
Output Cables	4mm ² , Length 300mm or customized
Connector type	MC4 compatible

Packaging Configurations

Per Pallet	31 pcs
Per 40' HQ Container	620 pcs

Linear Performance Warranty

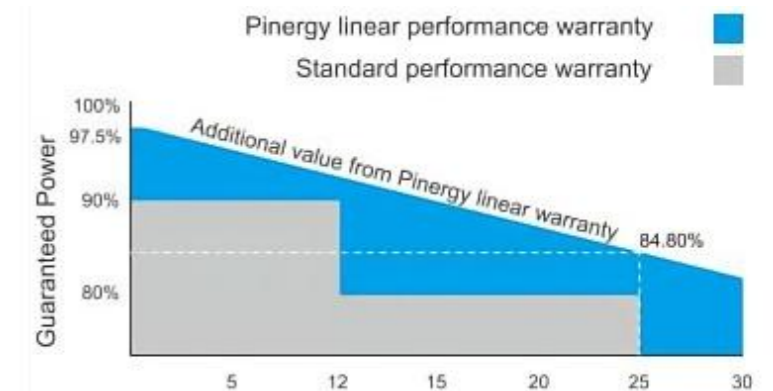
12 Years Product Warranty • 30 Years Linear Power Warranty

Temperature Characteristics

NOCT Temperature	44°C±2°C
Temperature Coefficient (Pmax)	-0.36%/°C
Temperature Coefficient (Voc)	-0.28%/°C
Temperature Coefficient (Isc)	0.05%/°C

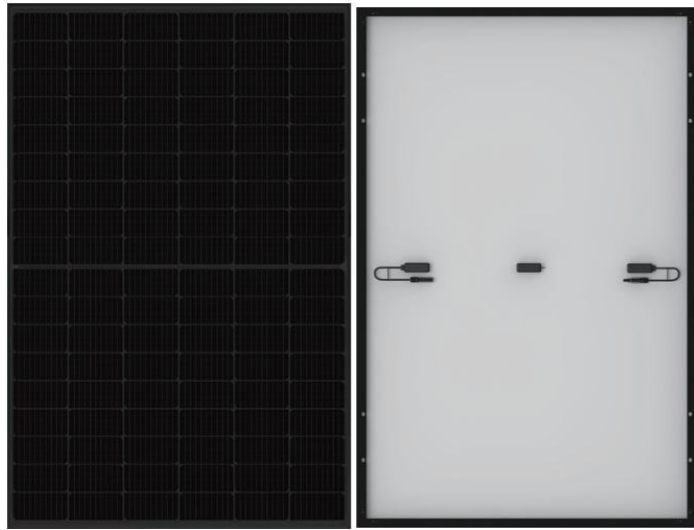
Maximum Ratings

Maximum system voltage(IEC)	1500V DC
Snow / Wind	5400Pa / 2400Pa
Operating Temperature	-40°C ~ +85°C
Maximum series fuse rating	20A



400-500W Series Solar Panels

LONGi Hi-MO 5m



LONGi

**LR5-54HPB
400~420M**

Features:

- ❏ Suitable for distributed projects
- ❏ Advanced module technology delivers superior module efficiency
- ❏ M10 Gallium-doped Wafer
- ❏ Integrated Segmented Ribbons
- ❏ 9-busbar Half-cut Cell
- ❏ Excellent outdoor power generation performance
- ❏ Aesthetic appearance with all black module design

Electrical Characteristics Test uncertainty for Pmax ±3%

Module Type	LR5-54HPB-400M		LR5-54HPB-405M		LR5-54HPB-410M		LR5-54HPB-415M		LR5-54HPB-420M	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Max Power(Pmax/W)	400	299.0	405	302.7	410	306.5	415	310.2	420	313.9
Open Circuit Voltage (Voc/V)	36.90	34.70	37.15	34.93	37.40	35.17	37.65	35.40	37.89	35.63
Short Circuit Current (Isc/A)	13.72	11.09	13.78	11.14	13.84	11.19	13.91	11.24	13.97	11.30
Voltage at Max Power (Vmp/V)	30.94	28.74	31.18	28.96	31.42	29.19	31.66	29.41	31.90	29.63
Current at Max Power (Imp/A)	12.93	10.40	12.99	10.45	13.05	10.50	13.11	10.55	13.17	10.59
Module efficiency (%)	20.5		20.7		21.0		21.3		21.5	

Standard Test Condition(STC): Irradiance 1000W/m², Cell Temperature 25°C, AM1.5.

Nominal Module Operating Temperature(NOCT): Irradiance 800W/m², Ambient Temperature 20°C, AM1.5, Wind Speed 1m/s.

Mechanical Parameters

Cell Orientation	108(6*18)
Junction Box	IP68, three diodes
Output Cable	4mm ² ±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

Mechanical Loading

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



Operating Parameters

Operational Temperature	-40°C ~ +85°C
Power Output Tolerance	0~3%
Voc and Isc Tolerance	±3%
Maximum System Voltage	DC1000V(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

Temperature Characteristics

Temperature Coefficient (Pmax)	-0.340%/°C
Temperature Coefficient (Voc)	-0.265%/°C
Temperature Coefficient (Isc)	0.050%/°C

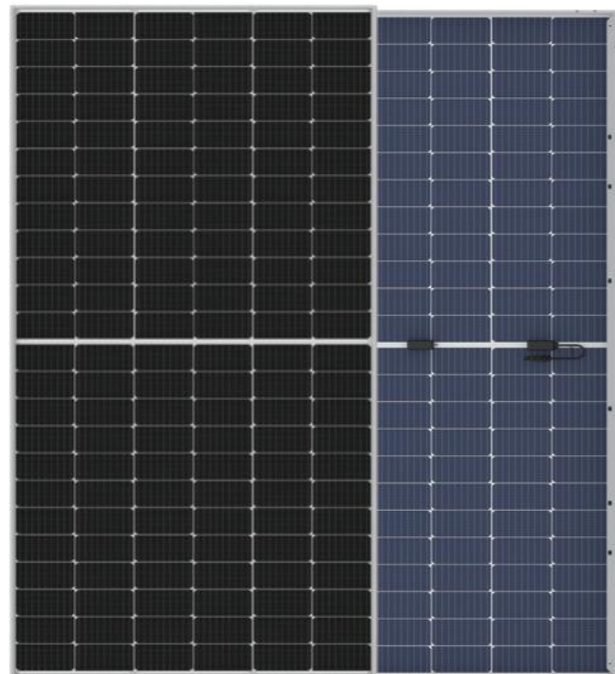
Linear Performance Warranty

12-year Warranty for Materials and Processing

25-year Warranty for Extra Linear Power Output



LONGi Hi-MO 4



LONGi

**LR4-72HBD
440~460M**

Features:

- ▣ Suitable for ground power plants and large C&I projects
- ▣ Advanced module technology delivers superior module efficiency
- ▣ M6 Gallium-doped Wafer
- ▣ 9-busbar Half-cut Cell
- ▣ Globally validated bifacial energy yield
- ▣ High module quality ensures long-term reliability

Electrical Characteristics

Test uncertainty for Pmax ±3%

Module Type	LR4-72HBD-440M		LR4-72HBD-445M		LR4-72HBD-450M		LR4-72HBD-455M		LR4-72HBD-460M	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Max Power(Pmax/W)	440	329.8	445	333.6	450	337.3	455	341.1	460	344.8
Open Circuit Voltage (Voc/V)	49.2	46.3	49.4	46.5	49.6	46.6	49.8	46.8	50.0	47.0
Short Circuit Current (Isc/A)	11.45	9.23	11.52	9.28	11.58	9.34	11.65	9.39	11.73	9.45
Voltage at Max Power (Vmp/V)	41.0	38.4	41.2	38.6	41.4	38.8	41.6	38.9	41.8	39.1
Current at Max Power (Imp/A)	10.73	8.60	10.80	8.65	10.87	8.70	10.93	8.76	11.01	8.82
Module efficiency (%)	20.2		20.5		20.7		20.9		21.2	

Standard Test Condition(STC): Irradiance 1000W/m², Cell Temperature 25°C, AM1.5.

Nominal Module Operating Temperature(NOCT): Irradiance 800W/m², Ambient Temperature 20°C, AM1.5, Wind Speed 1m/s.

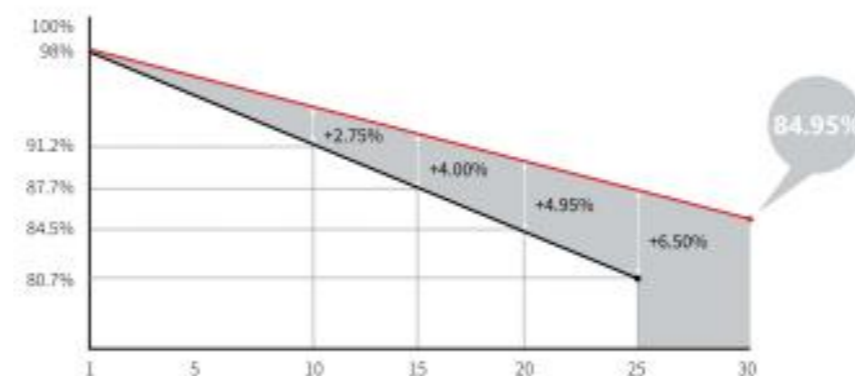
Mechanical Parameters

Cell Orientation	144(6*24)
Junction Box	IP68, three diodes
Output Cable	4mm ² , +400, -200mm / ±1400mm length can be customized
Glass	Dual glass, 2.0+2.0mm heat strengthened glass
Frame	Anodized aluminum alloy frame
Weight	27.5kg
Dimension	2094*10384*35mm
Packaging	31pcs per pallet / 155pcs per 20'GP / 682pcs per 40'HC

Mechanical Loading

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

30-Year Power Warranty



Operating Parameters

Operational Temperature	-40°C ~ +85°C
Power Output Tolerance	0~3%
Voc and Isc Tolerance	±3%
Maximum System Voltage	DC1000V(IEC/UL)
Maximum Series Fuse Rating	25A
Nominal Operating Cell Temperature	45±2°C
Protection Class	Class II
Bifaciality	70±5%
Fire Rating	UL type 29 IEC Class C

Temperature Characteristics

Temperature Coefficient (Pmax)	-0.340%/°C
Temperature Coefficient (Voc)	-0.265%/°C
Temperature Coefficient (Isc)	0.050%/°C

Linear Performance Warranty

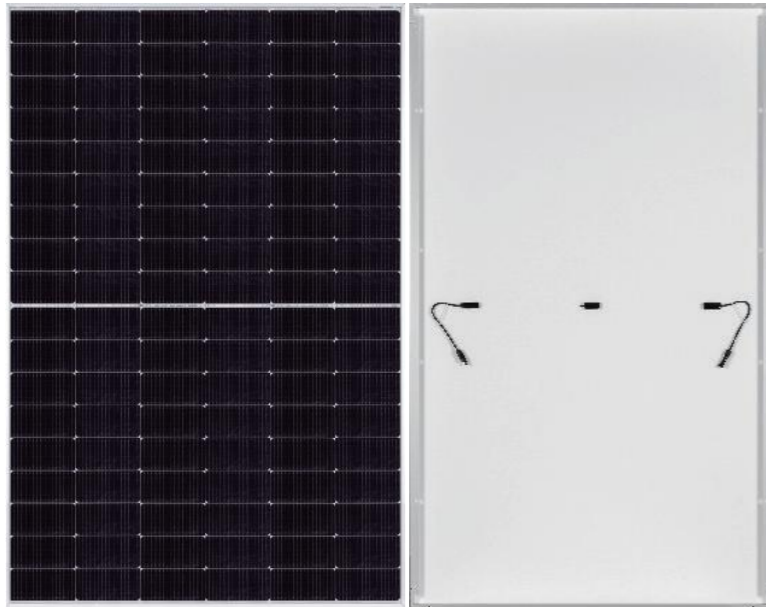
12-year Warranty for Materials and Processing

30-year Warranty for Extra Linear Power Output



400-500W Series Solar Panels

TONGWEI N-type Half-cell Monofacial Module(54)



TWMND-54HS
415-435W

Features:

- ❏ High Power Output Low LCOE
- ❏ Maximum Power 435W+
- ❏ High Reliability
- ❏ Low LID

Linear Performance Warranty:

- 12-year Warranty for Materials
- 30-year Warranty for Linear Power Output

Electrical Characteristics

Module Type	TWMND-54HS 415W		TWMND-54HS 420W		TWMND-54HS 425W		TWMND-54HS 430W		TWMND-54HS 435W	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Testing Condition	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power: Pmax [W]	415	312.0	420	316.0	425	320.0	430	324.0	435	328.0
Open Circuit Voltage: Voc [V]	37.85	35.98	38.00	36.14	38.15	36.30	38.30	36.46	38.45	36.62
Short Circuit Current: Isc [A]	14.22	11.51	14.27	11.57	14.32	11.63	14.37	11.69	14.42	11.75
Voltage at Maximum Power: Vmp [V]	31.25	29.18	31.41	29.34	31.57	29.50	31.73	29.66	31.89	29.82
Current at Maximum Power: Imp [A]	13.28	10.69	13.37	10.77	13.46	10.85	13.55	10.92	13.64	11.00
Module Efficiency: η [%]	21.3	/	21.5	/	21.8	/	22.0	/	22.3	/

Standard Test Condition(STC): Irradiance 1000W/m², Cell Temperature 25°C, AM1.5, Measuring Tolerance: ±3%.
Nominal Module Operating Temperature(NMOT): Irradiance 800W/m², Ambient Temperature 20°C, AM1.5, Wind Speed 1m/s.

Mechanical Parameters

Cell	TNC
Cell Orientation	108(6*18)
Dimension	1722±2*1134±2*30mm
Weight	20.5kg
Front Glass	3.2mm high transmittance, AR coated tempered glass
Backsheet	White
Frame	Anodized aluminum alloy frame
Junction Box	IP68, 3 diodes
Output Cable	4.0mm ²
Cable Length	400mm, -200mm or ±1200mm, length can be customized
Wind/Snow Load	2400Pa/5400Pa
Packaging	36pcs per pallet, 936pcs per 40'HC

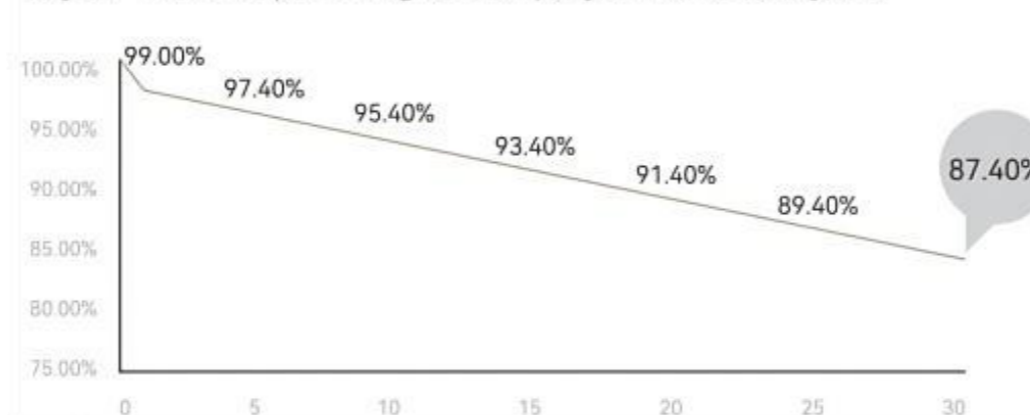
Temperature Ratings

Temperature Coefficient (Pmax)	-0.30% / °C
Temperature Coefficient (Voc)	-0.25% / °C
Temperature Coefficient (Isc)	+0.046% / °C
NMOT	45±2°C

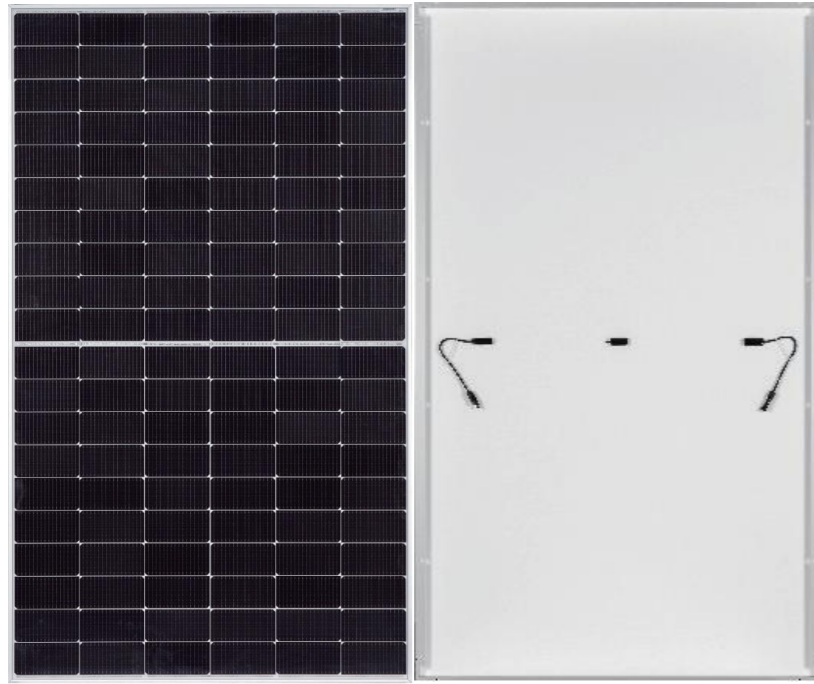
Operating Parameters

Operational Temperature	-40°C ~ +85°C
Maximum System Voltage	1500V DC
Maximum Series Fuse Rating	25A
Power Output Tolerance	0 ~ +5W

1st year <1%, 0.4% power degradation per year from 2 to 30 years



TONGWEI P-type Half-cell Monofacial Module(60)



TWMPD-60HS
445-465W

Features:

- ❏ High Power Output Low LCOE
- ❏ Maximum Power 465W+
- ❏ High Reliability
- ❏ Low LID

Linear Performance Warranty:

12-year Warranty for Materials

25-year Warranty for Linear Power Output

Electrical Characteristics

Module Type	TWMPD-60HS 445W		TWMPD-60HS 450W		TWMPD-60HS 455W		TWMPD-60HS 460W		TWMPD-60HS 465W	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Testing Condition	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power: Pmax [W]	445		450		455		460		465	
Open Circuit Voltage: Voc [V]	41.04		41.21		41.38		41.55		41.72	
Short Circuit Current: Isc [A]	13.79		13.84		13.89		13.94		13.99	
Voltage at Maximum Power: Vmp [V]	33.67		33.83		33.99		34.15		34.31	
Current at Maximum Power: Imp [A]	13.22		13.30		13.39		13.47		13.55	
Module Efficiency: η [%]	20.6	/	20.8	/	21.0	/	21.3	/	21.5	/

Standard Test Condition(STC): Irradiance 1000W/m², Cell Temperature 25°C, AM1.5, Measuring Tolerance: ±3%.

Nominal Module Operating Temperature(NMOT): Irradiance 800W/m², Ambient Temperature 20°C, AM1.5, Wind Speed 1m/s.

Mechanical Parameters

Cell	TPC
Cell Orientation	120[6*20]
Dimension	1908±2*1134±2*35mm
Weight	24.2kg
Front Glass	3.2mm high transmittance, AR coated tempered glass
Backsheet	White
Frame	Anodized aluminum alloy frame
Junction Box	IP68, 3 diodes
Output Cable	4.0mm ²
Cable Length	+1200mm, -1200mm, length can be customized
Wind/Snow Load	2400Pa/5400Pa
Packaging	31pcs per pallet, 744pcs per 40'HC

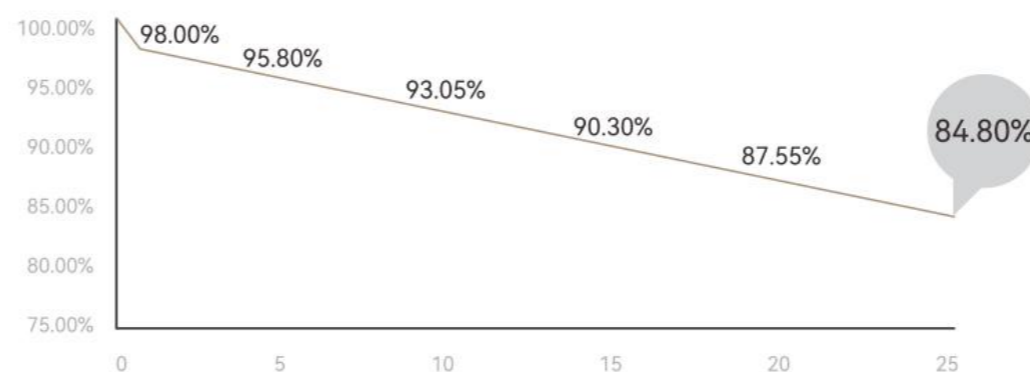
Temperature Ratings

Temperature Coefficient (Pmax)	-0.34% / °C
Temperature Coefficient (Voc)	-0.27% / °C
Temperature Coefficient (Isc)	+0.045% / °C
NMOT	45±2°C

Operating Parameters

Operational Temperature	-40°C ~ +85°C
Maximum System Voltage	1500V DC
Maximum Series Fuse Rating	25A
Power Output Tolerance	0 ~ +5W

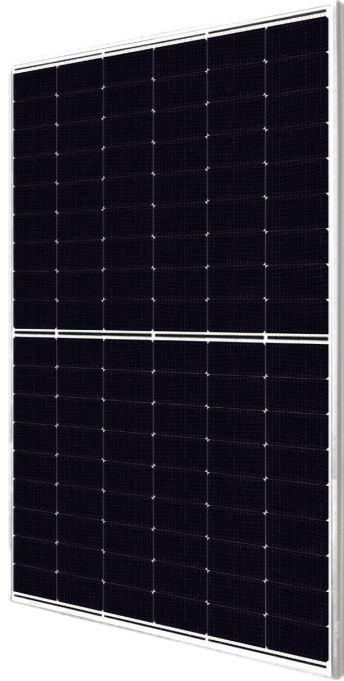
1st year <2%, 0.55% power degradation per year from 2 to 25 years



400-500W Series Solar Panels

CanadianSolar TOPHiKu6

N-type TOPCon Technology



CS6R 420-440 T

Features:

- ❖ Module power up to 440 W
- ❖ Module efficiency up to 22.5 %
- ❖ Excellent anti-LeTID & anti-PID performance
- ❖ Low power degradation, high energy yield
- ❖ Lower temperature coefficient (Pmax): -0.29%/°C, increases energy yield in hot climate
- ❖ Lower LCOE & system cost
- ❖ Minimizes micro-crack impacts
- ❖ Heavy snow load up to 5400Pa, wind load up to 2400Pa

Warranty:

12-year Enhanced Product Warranty on Materials and Workmanship

30-year Linear Power Performance Warranty

Electrical Data

Module Type	CS6R 420T		CS6R 425T		CS6R 430T		CS6R 435T		CS6R 440T	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Testing Condition	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Nominal Max. Power (Pmax/W)	420	318	425	321	430	325	435	329	440	333
Opt. Operating Voltage (Vmp/V)	31.6	29.9	31.8	30.1	32.0	30.3	32.2	30.4	32.4	30.6
Opt. Operating Current (Imp/A)	13.30	10.63	13.37	10.69	13.44	10.75	13.51	10.81	13.59	10.87
Open Circuit Voltage (Voc/V)	38.6	36.5	38.8	36.7	39.0	36.9	39.2	37.1	39.4	37.3
Short Circuit Current (Isc/A)	13.71	11.05	13.78	11.11	13.86	11.18	13.94	11.24	14.01	11.30
Module Efficiency(%)	21.5	/	21.8	/	22.0	/	22.3	/	22.5	/
Operating Temperature	-40°C ~ +85°C									
Max. System Voltage	1500V (IEC/UL) or 1000V (IEC/UL)									
Module Fire Performance	TYPE 1 (UL 61730 1500V) or TYPE 2 (UL 61730 1000V) or CLASS C (IEC 61730)									
Max. Series Fuse Rating	25 A									
Application Classification	Class A									
Power Tolerance	0 ~ + 10 W									

Standard Test Condition(STC): Irradiance 1000W/m², Cell Temperature 25°C, AM1.5, Measuring Tolerance: ±3%.

Nominal Module Operating Temperature(NMOT): Irradiance 800W/m², Ambient Temperature 20°C, AM1.5, Wind Speed 1m/s.

Mechanical Data

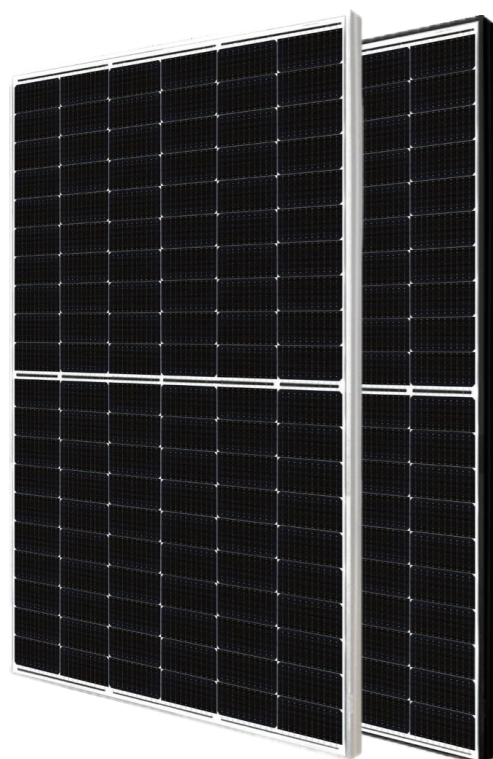
Cell Type	TOPCon cells	J-Box	IP68, 3 bypass diodes
Cell Arrangement	108[2*(9*6)]	Cable	4 mm ² (IEC), 12 AWG (UL)
Dimensions	1722*1134*30mm (67.8*44.6*1.18 in)	Connector	T6 or MC4 or MC4-EVO2 or MC4-EVO2A
Weight	21.3 kg (47.0 lbs)	Cable Length (Including Connector)	Portrait: 350 mm (13.8 in) (+) / 250 mm (9.8 in) (-); landscape: 1100 mm (43.3 in)
Front Cover	3.2 mm tempered glass with anti reflective coating	Per Pallet	35 pieces
Frame	Anodized aluminium alloy	Per Container (40' HQ)	910 pieces or 840 pieces (only for US & Canada)

Temperature Characteristics

Temperature Coefficient (Pmax)	-0.29% / °C
Temperature Coefficient (Voc)	-0.25% / °C
Temperature Coefficient (Isc)	0.05% / °C
Nominal Module Operating Temperature	41±3°C



CanadianSolar HiKu6 Mono PERC



CS6L 445-465 MS

Features:

- ❖ Module power up to 465 W
- ❖ Module efficiency up to 21.5 %
- ❖ Lower LCOE & system cost
- ❖ Comprehensive LID / LeTID mitigation technology, up to 50% lower degradation
- ❖ Better shading tolerance
- ❖ Minimizes micro-crack impacts
- ❖ Heavy snow load up to 5400Pa, wind load up to 2400Pa

Warranty:

12-year Enhanced Product Warranty on Materials and Workmanship

25-year Linear Power Performance Warranty

Electrical Data

Module Type	CS6L 445MS		CS6L 450MS		CS6L 455MS		CS6L 460MS		CS6L 465MS	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Testing Condition	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Nominal Max. Power (Pmax/W)	445	334	450	338	455	341	460	345	465	349
Opt. Operating Voltage (Vmp/V)	34.2	32.1	34.4	32.2	34.6	32.4	34.8	32.6	35.0	32.8
Opt. Operating Current (Imp/A)	13.03	10.41	13.10	10.47	13.17	10.52	13.24	10.58	13.30	10.63
Open Circuit Voltage (Voc/V)	40.8	38.6	41.0	38.8	41.2	38.9	41.4	39.1	41.6	39.3
Short Circuit Current (Isc/A)	13.86	11.18	13.9	11.21	13.95	11.25	14.00	11.29	14.09	11.36
Module Efficiency(%)	20.6	/	20.9	/	21.1	/	21.3	/	21.5	/
Operating Temperature	-40°C ~ +85°C									
Max. System Voltage	1500V (IEC/UL) or 1000V (IEC/UL)									
Module Fire Performance	TYPE 1 (UL 61730 1500V) or TYPE 2 (UL 61730 1000V) or CLASS C (IEC 61730)									
Max. Series Fuse Rating	25 A									
Application Classification	Class A									
Power Tolerance	0 ~ + 10 W									

Standard Test Condition(STC): Irradiance 1000W/m², Cell Temperature 25°C, AM1.5, Measuring Tolerance: ±3%.
Nominal Module Operating Temperature(NMOT): Irradiance 800W/m², Ambient Temperature 20°C, AM1.5, Wind Speed 1m/s.

Mechanical Data

Cell Type	Mono-crystalline	J-Box	IP68, 3 bypass diodes
Cell Arrangement	120[2*(10*6)]	Cable	4 mm ² (IEC), 12 AWG (UL)
Dimensions	1903*1134*30mm (74.9*44.6*1.18 in)	Connector	T6 or MC4 or MC4-EVO2 or MC4-EVO2A
Weight	24.2 kg (53.4 lbs)	Cable Length (Including Connector)	Portrait: 350 mm (13.8 in) (+) / 250 mm (9.8 in) (-); landscape: 1100 mm (43.3 in)
Front Cover	3.2 mm tempered glass with anti-ref lective coating	Per Pallet	35 pieces
Frame	Anodized aluminium alloy	Per Container (40' HQ)	840 pieces

Temperature Characteristics

Temperature Coefficient (Pmax)	-0.34% / °C
Temperature Coefficient (Voc)	-0.26% / °C
Temperature Coefficient (Isc)	0.05% / °C
Nominal Module Operating Temperature	41±3°C



500-600W Series Solar Panels

PNG Solar HALF-CELL MBB MONO PERC



**PNG-144M(182)
535-555 Watt**

Features:

- ❖ **Multi Busbar Solar Cell:** Stronger current collection ability, Special circuit design with much lower hot spot temperature
- ❖ **PID Resistant:** Excellent PID resistance at 96 hours (85°C/85%) test, and also can be improved to meet higher standards for the particularity.
- ❖ **Module efficiency up to 21.48%:** Half cell structure brings low resistance characteristic, higher lifetime generating capacity. simultaneously lower annual power attenuation.
- ❖ **Anti-Crack:** Excellent anti-microcracking performance with more balanced interior stress.
- ❖ **Low-Light Performance:** Excellent power generation performance under Low-Light condition due to multi busbar; better shading response benefit from half cell module.
- ❖ **Strength and Durability:** Certified for 5400Pa snow and 2400Pa Wind loads test.

Electrical Specifications

Module Type	PNG144M-535		PNG144M-540		PNG144M-545		PNG144M-550		PNG144M-555	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Max. Power (Pmax/W)	535	399	540	403	545	407	550	411	555	415
Voltage at Max. Power (Vmp/V)	41.0	38.2	41.2	38.4	41.4	38.6	41.6	38.8	41.8	39.0
Current at Max. Power (Imp/A)	13.05	10.44	13.11	10.49	13.17	10.54	13.23	10.58	13.28	10.63
Open circuit voltage (Voc/V)	49.2	46.1	49.4	46.3	49.6	46.4	49.8	46.6	50.0	46.8
Short circuit current (Isc/A)	13.81	11.13	13.87	11.18	13.87	11.23	13.99	11.28	14.06	11.34
Module efficiency (%)	20.70		20.90		21.09		21.28		21.48	
Power Tolerance (W)	0 ~ +5									

Standard Test Condition(STC): Irradiance 1000W/m², Cell Temperature 25°C, AM1.5.

Nominal Module Operating Temperature(NOCT): Irradiance 800W/m², Ambient Temperature 20°C, AM1.5, Wind Speed 1m/s.

Mechanical Specifications

Cell Type	MBB MONO 182*91mm
No. of Cells	144(6*24)
Dimension	2279*1134*35mm
Weight	29kg
Glass	3.2mm, Low Iron Tempered Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68, 3 diodes
Output Cables	4mm ² , Length 300mm or customized
Connector type	MC4 compatible

Packaging Configurations

Per Pallet	31 pcs
Per 40' HQ Container	620 pcs

Linear Performance Warranty

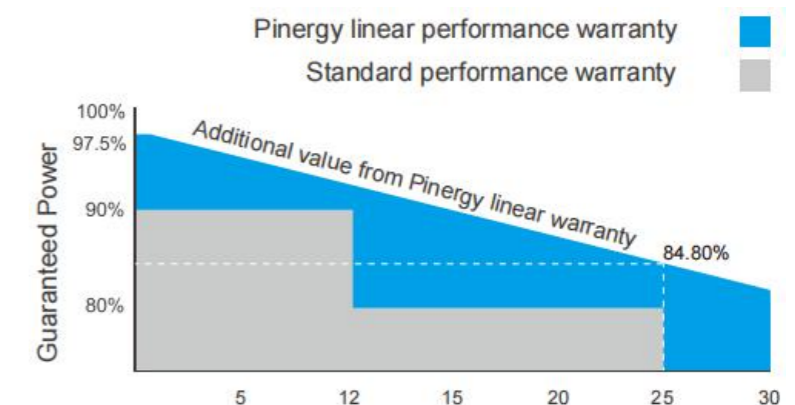
12 Years Product Warranty • 30 Years Linear Power Warranty

Temperature Characteristics

NOCT Temperature	44°C±2°C
Temperature Coefficient (Pmax)	-0.36%/°C
Temperature Coefficient (Voc)	-0.28%/°C
Temperature Coefficient (Isc)	0.05%/°C

Maximum Ratings

Maximum system voltage(IEC)	1500V DC
Snow / Wind	5400Pa / 2400Pa
Operating Temperature	-40°C ~ +85°C
Maximum series fuse rating	25A



PNG Solar MONO CRYSTALLINE PERC



PNG-120M(210)
580-615 Watt

Features:

- IP68 junction box, connector:** IP68 junction box and connector have a high degree of waterproof, effectively resist the harsh environment.
- MBB half-cut cell technology:** New circuit design, lower internal current, lower Rs loss.
- PID Resistant:** Excellent PID resistance at 96 hours (85°C/85%) test, and also can be improved to meet higher standards for the particularly harsh environment.
- Significantly lower the risk of hot spot:** Special circuit design with much lower hot spot temperature.
- Lower LCOE:** 2% more power generation, lower LCOE.

Electrical Specifications

Module Type	PNG120M-580		PNG120M-585		PNG120M-590		PNG120M-595		PNG120M-600	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Max. Power (Pmax/W)	580	438	585	443	590	446	595	450	600	454
Voltage at Max. Power (Vmp/V)	33.6	31.3	33.8	31.5	34.0	31.7	34.2	31.9	34.4	32.1
Current at Max. Power (Imp/A)	17.28	14.02	17.33	14.05	17.37	14.09	17.41	14.12	17.46	14.16
Open circuit voltage (Voc/V)	40.7	38.3	40.9	38.5	41.1	38.7	41.3	38.9	41.5	39.1
Short circuit current (Isc/A)	18.34	14.79	18.40	14.83	18.45	14.87	18.50	14.92	18.55	14.96
Module efficiency (%)	20.50		20.70		20.80		21.00		21.20	
Power Tolerance (W)	0 ~ +5									

Standard Test Condition(STC): Irradiance 1000W/m², Cell Temperature 25°C, AM1.5.

Nominal Module Operating Temperature(NOCT): Irradiance 800W/m², Ambient Temperature 20°C, AM1.5, Wind Speed 1m/s.

Mechanical Specifications

Cell Type	MBB MONO 210*105mm
No. of Cells	120(6*20)
Dimension	2172*1303*35mm
Weight	30.9kg
Glass	3.2mm, Low Iron Tempered Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68, 3 diodes
Output Cables	4mm ² , Length 300mm or customized
Connector type	MC4 compatible

Packaging Configurations

Per Pallet	31 pcs
Per 40' HQ Container	558 pcs

Linear Performance Warranty

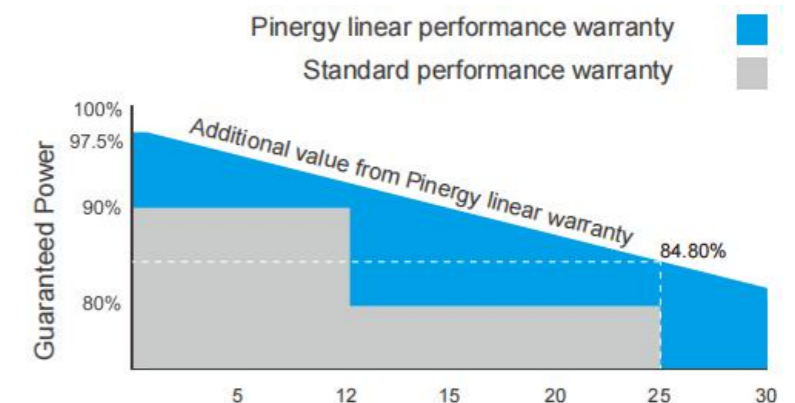
12 Years Product Warranty • 30 Years Linear Power Warranty

Temperature Characteristics

NOCT Temperature	44°C±2°C
Temperature Coefficient (Pmax)	-0.36%/°C
Temperature Coefficient (Voc)	-0.28%/°C
Temperature Coefficient (Isc)	0.05%/°C

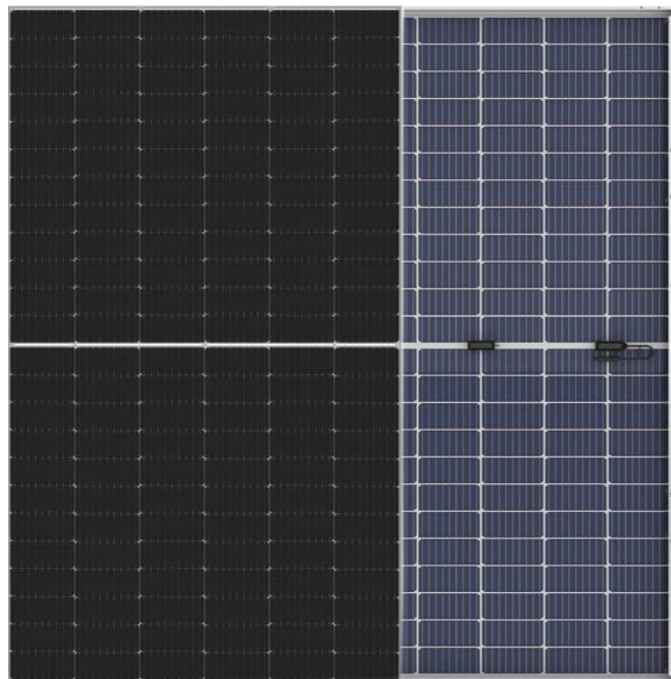
Maximum Ratings

Maximum system voltage(IEC)	1500V DC
Snow / Wind	5400Pa / 2400Pa
Operating Temperature	-40°C ~ +85°C
Maximum series fuse rating	30A



500-600W Series Solar Panels

LONGi Hi-MO 5



LONGi

**LR5-72HBD
530~550M**

Features:

- Based on M10-182mm wafer, best choice for ultra-large power plants
- Advanced module technology delivers superior module efficiency
- M10 Gallium-doped Wafer
- Smart Soldering
- 9-busbar Half-cut Cell
- Globally validated bifacial energy yield
- High module quality ensures long-term reliability

Electrical Characteristics Test uncertainty for Pmax ±3%

Module Type	LR5-72HBD-530M		LR5-72HBD-535M		LR5-72HBD-540M		LR5-72HBD-545M		LR5-72HBD-550M	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Max Power(Pmax/W)	530	396.2	535	399.9	540	403.6	545	407.4	550	411.1
Open Circuit Voltage (Voc/V)	49.20	46.26	49.35	46.40	49.50	46.54	49.65	46.68	49.80	46.82
Short Circuit Current (Isc/A)	13.71	11.07	13.78	11.12	13.85	11.17	13.92	11.23	13.99	11.29
Voltage at Max Power (Vmp/V)	41.35	38.58	41.50	38.72	41.65	38.86	41.80	39.00	41.95	39.14
Current at Max Power (Imp/A)	12.82	10.27	12.90	10.33	12.97	10.39	13.04	10.45	13.12	10.51
Module efficiency (%)	20.7		20.9		21.1		21.3		21.5	

Standard Test Condition(STC): Irradiance 1000W/m², Cell Temperature 25°C, AM1.5.
Nominal Module Operating Temperature(NOCT): Irradiance 800W/m², Ambient Temperature 20°C, AM1.5, Wind Speed 1m/s.

Mechanical Parameters

Cell Orientation	144(6*24)
Junction Box	IP68, three diodes
Output Cable	4mm ² , +400, -200mm / ±1400mm length can be customized
Glass	Dual glass, 2.0+2.0mm heat strengthened glass
Frame	Anodized aluminum alloy frame
Weight	32.3kg
Dimension	2256*1133*35mm
Packaging	31pcs per pallet / 155pcs per 20'GP / 620pcs per 40'HC

Operating Parameters

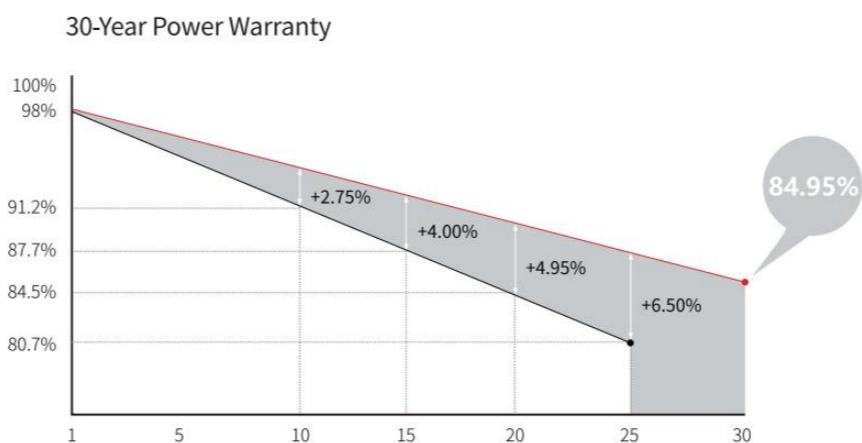
Operational Temperature	-40°C ~ +85°C
Power Output Tolerance	0~3%
Voc and Isc Tolerance	±3%
Maximum System Voltage	DC1500V(IEC/UL)
Maximum Series Fuse Rating	30A
Nominal Operating Cell Temperature	45±2°C
Protection Class	Class II
Bifaciality	70±5%
Fire Rating	UL type 29 IEC Class C

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 Characteristics

Temperature Coefficient (Pmax)	-0.340%/°C
Temperature Coefficient (Voc)	-0.265%/°C
Temperature Coefficient (Isc)	0.050%/°C

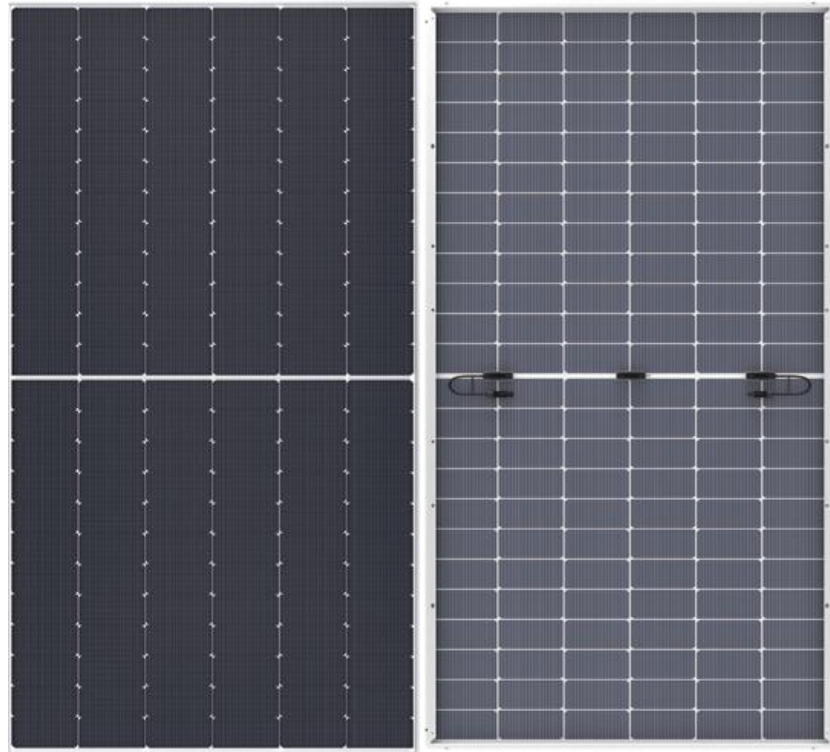


Linear Performance Warranty

- 12-year Warranty for Materials and Processing
- 30-year Warranty for Extra Linear Power Output



LONGi Hi-MO 7



LONGi

**LR5-72HGD
560~590M**

Features:

- Based on M10-182mm wafer, best choice for ultra-large power plants
- Advanced module technology delivers superior module efficiency
- M10 Gallium-doped Wafer
- Smart Soldering
- 9-busbar Half-cut Cell
- Globally validated bifacial energy yield
- High module quality ensures long-term reliability

Electrical Characteristics

Test uncertainty for Pmax ±3%

Module Type	LR5-72HGD-560M		LR5-72HGD-565M		LR5-72HGD-570M		LR5-72HGD-575M		LR5-72HGD-580M		LR5-72HGD-585M		LR5-72HGD-590M	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Max Power(Pmax/W)	560	426.3	565	430.1	570	433.9	575	437.7	580	441.5	585	445.3	590	449.1
Open Circuit Voltage (Voc/V)	50.99	48.46	51.09	48.55	51.19	48.65	51.30	48.75	51.41	48.86	51.52	48.96	51.63	49.07
Short Circuit Current (Isc/A)	13.89	11.16	13.97	11.22	14.05	11.29	14.14	11.35	14.22	11.42	14.30	11.48	14.38	11.55
Voltage at Max Power (Vmp/V)	42.82	40.69	42.91	40.78	43.00	40.87	43.11	40.97	43.22	41.07	43.33	41.18	43.44	41.28
Current at Max Power (Imp/A)	13.08	10.48	13.17	10.55	13.26	10.62	13.34	10.68	13.42	10.75	13.51	10.82	13.59	10.89
Module efficiency (%)	21.7		21.9		22.1		22.3		22.5		22.6		22.8	

Standard Test Condition(STC): Irradiance 1000W/m², Cell Temperature 25°C, AM1.5.

Nominal Module Operating Temperature(NOCT): Irradiance 800W/m², Ambient Temperature 20°C, AM1.5, Wind Speed 1m/s.

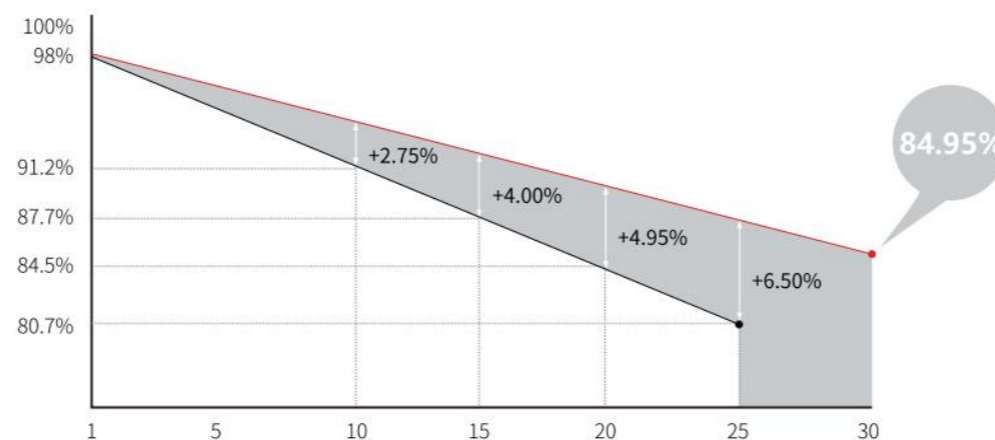
Mechanical Parameters

Cell Orientation	144(6*24)
Junction Box	IP68, three diodes
Output Cable	4mm ² , +400, -200mm / ±1400mm length can be customized
Glass	Dual glass, 2.0+2.0mm heat strengthened glass
Frame	Anodized aluminum alloy frame
Weight	31.8kg
Dimension	2278*1134*30mm
Packaging	36pcs per pallet / 180pcs per 20'GP / 720pcs per 40'HC

Mechanical Loading

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

30-Year Power Warranty



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	30A
Nominal Operating Cell Temperature	45±2°C
Protection Class	Class II
Bifaciality	80±5%
Fire Rating	UL type 29 IEC Class C

Temperature Characteristics

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

Linear Performance Warranty

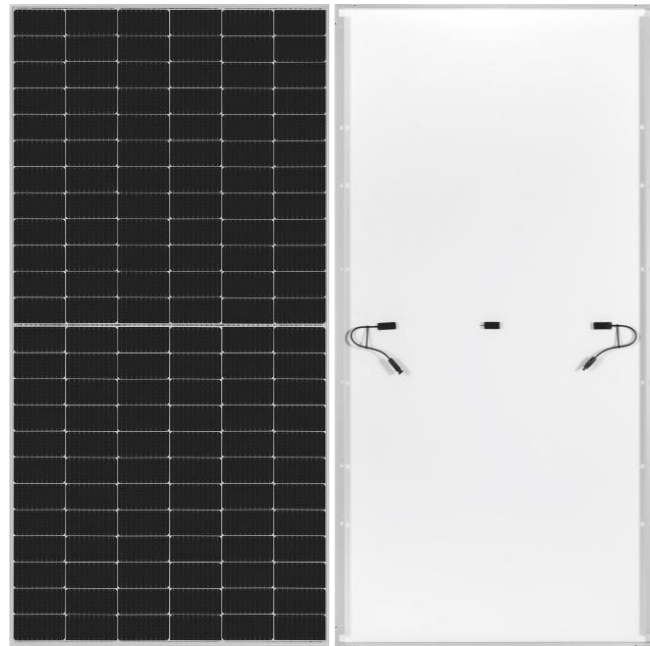
12-year Warranty for Materials and Processing

30-year Warranty for Extra Linear Power Output



500-600W Series Solar Panels

TONGWEI MBB Half-cell Monofacial Module(72)³⁵



TW535~560MAP
M10-144-H

Features:

- ❖ High Power Output Low LCOE
- ❖ Maximum Power 560W
- ❖ High Reliability
- ❖ Low LID

Warranty:

12-year Warranty for Materials

25-year Warranty for Linear Power Output

Electrical Characteristics

Module Type	TW535		TW540		TW545		TW550		TW555		TW560	
	MAP-144-H		MAP-144-H		MAP-144-H		MAP-144-H		MAP-144-H		MAP-144-H	
Testing Condition	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power: Pmax/W	535	404.8	540	408.6	545	412.4	550	416.2	555	420	560	423.8
Open Circuit Voltage: Voc/V	49.51	46.74	49.75	46.96	49.98	47.18	50.22	47.40	50.45	47.62	50.68	47.85
Short Circuit Current: Isc/A	13.60	10.89	13.63	10.92	13.66	10.94	13.70	10.97	13.73	10.99	13.76	11.02
Voltage at Maximum Power: Vmp/V	41.77	38.74	42.06	39.01	42.35	39.28	42.64	39.55	42.93	39.82	43.22	40.09
Current at Maximum Power: Imp/A	12.81	10.45	12.84	10.47	12.87	10.50	12.90	10.52	12.93	10.55	12.96	10.57
Module Efficiency: η/%	20.7	/	20.9	/	21.1	/	21.3	/	21.5	/	21.7	/

Standard Test Condition(STC): Irradiance 1000W/m², Cell Temperature 25°C, AM1.5, Measuring Tolerance: ±3%.
Nominal Module Operating Temperature(NMOT): Irradiance 800W/m², Ambient Temperature 20°C, AM1.5, Wind Speed 1m/s.

Mechanical Parameters

Cells	Monocrystalline silicon cell
Orientation	144[6*24]
Size	2278±2*1134±2*35mm
Weight	27.8kg
Glass	3.2mm high transmittance, AR coated heat strengthened glass
Backsheet	White
Frame	Anodized aluminum alloy frame
Junction Box	IP68, 3 diodes
Cable	4.0mm ² Landscape: 1200/1200mm, Portrait: 280/280mm
Connector	MC4 Compatible
Wind/Snow Load	2400Pa/5400Pa
Packaging	31pcs per pallet, 620pcs per 40'HC

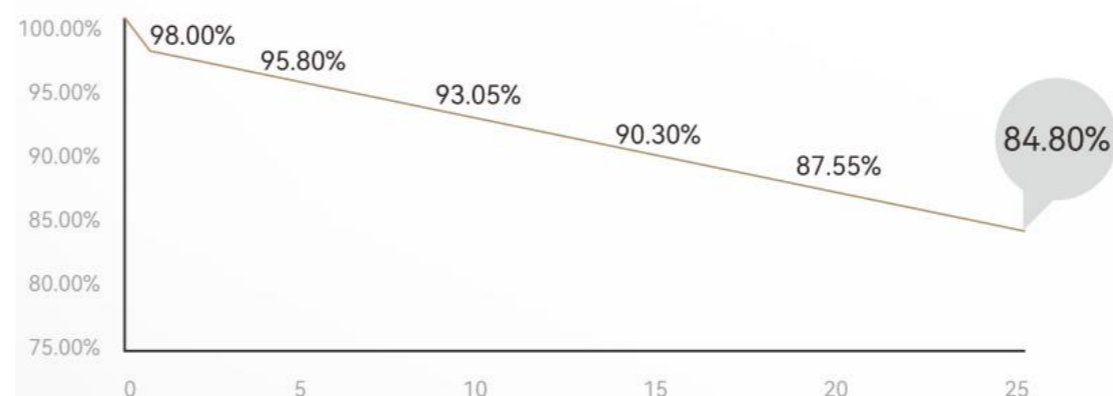
Temperature Ratings

Temperature Coefficient (Pmax)	-0.35% / °C
Temperature Coefficient (Voc)	-0.27% / °C
Temperature Coefficient (Isc)	0.045% / °C
NMOT	43±2°C

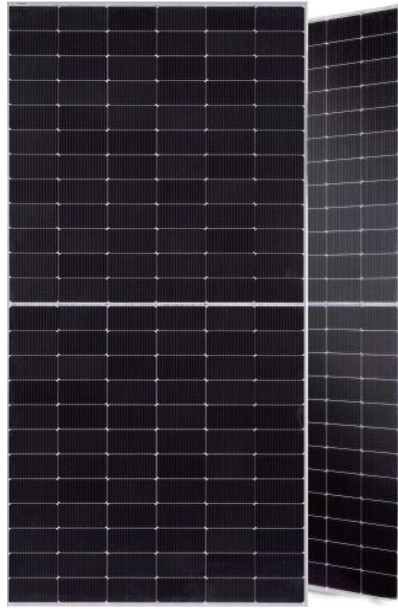
Operating Parameters

Operational Temperature	-40°C ~ +85°C
Maximum System Voltage	1500V DC
Maximum Series Fuse Rating	25A
Power Output Tolerance	0 ~ +5W

1st year <2%, 0.55% power degradation per year from 2 to 25 years



TONGWEI N-type Half-cell Monofacial Module(72)



TWMND-72HS
560-580W

Features:

- ❖ High Power Output Low LCOE
- ❖ Maximum Power 580W+
- ❖ High Reliability
- ❖ Low LID

Warranty:

12-year Warranty for Materials
30-year Warranty for Linear Power Output

Electrical Characteristics

Module Type	TWMND-72HS 560		TWMND-72HS 565		TWMND-72HS 570		TWMND-72HS 575		TWMND-72HS 580	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Testing Condition	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power: Pmax/W	560	423.8	565	427.6	570	431.4	575	435.2	580	438.9
Open Circuit Voltage: Voc/V	52.00	49.35	52.20	49.57	52.40	49.80	52.60	50.03	52.80	50.22
Short Circuit Current: Isc/A	13.34	10.51	13.38	10.54	13.42	10.56	13.46	10.59	13.50	10.63
Voltage at Maximum Power: Vmp/V	44.23	42.32	44.43	42.60	44.63	42.87	44.83	43.15	45.03	43.34
Current at Maximum Power: Imp/A	12.66	10.01	12.72	10.03	12.77	10.06	12.83	10.08	12.88	10.12
Module Efficiency: η/%	21.7	/	21.9	/	22.1	/	22.3	/	22.5	/

Standard Test Condition(STC): Irradiance 1000W/m², Cell Temperature 25°C, AM1.5, Measuring Tolerance: ±3%.
Nominal Module Operating Temperature(NMOT): Irradiance 800W/m², Ambient Temperature 20°C, AM1.5, Wind Speed 1m/s.

Mechanical Parameters

Cells	TNC
Cell Orientation	144[6*24]
Dimension	2278±2*1134±2*35mm
Weight	27.8kg
Front Glass	3.2mm high transmittance, AR coated tempered glass
Backsheet	White
Frame	Anodized aluminum alloy frame
Junction Box	IP68, 3 diodes
Output Cable	4.0mm ²
Cable Length	+400mm, -200mm or ±1400mm, length can be customized
Wind/Snow Load	2400Pa/5400Pa
Packaging	31pcs per pallet, 620pcs per 40'HC

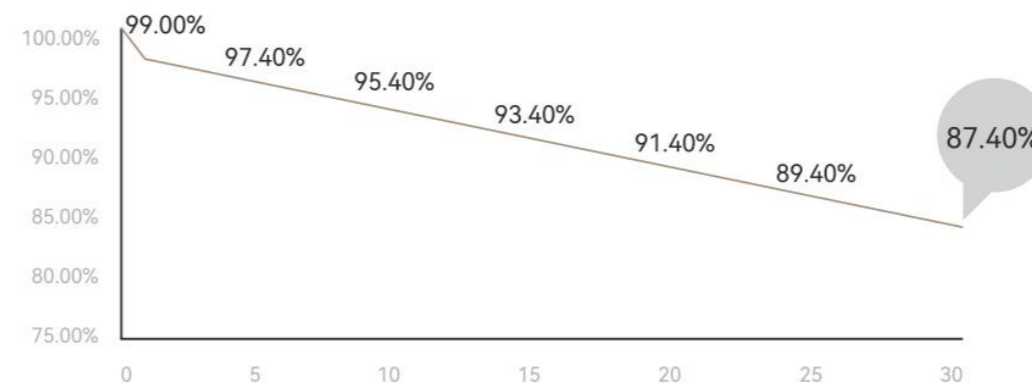
Temperature Ratings

Temperature Coefficient (Pmax)	-0.30% / °C
Temperature Coefficient (Voc)	-0.25% / °C
Temperature Coefficient (Isc)	+0.046% / °C
NMOT	45±2°C

Operating Parameters

Operational Temperature	-40°C ~ +85°C
Maximum System Voltage	1500V DC
Maximum Series Fuse Rating	25A
Power Output Tolerance	0 ~ +5W

1st year <1%, 0.4% power degradation per year from 2 to 30 years



500-600W Series Solar Panels

CanadianSolar HiKu6 Mono PERC



CS6W 530-555 MS

Features:

- ❏ Module power up to 555 W
- ❏ Module efficiency up to 21.5 %
- ❏ Up to 4.5 % lower LCOE
- ❏ Up to 5.6 % lower system cost
- ❏ Comprehensive LID / LeTID mitigation technology, up to 50% lower degradation
- ❏ Compatible with mainstream trackers, cost effective product for utility power plant
- ❏ Better shading tolerance
- ❏ Minimizes micro-crack impacts
- ❏ Heavy snow load up to 5400 Pa, wind load up to 2400 Pa

Warranty:

12-year Enhanced Product Warranty on Materials and Workmanship

30-year Linear Power Performance Warranty

Electrical Data

Module Type	CS6W 530MS		CS6W 535MS		CS6W 540MS		CS6W 545MS		CS6W 550MS		CS6W 555MS	
Testing Condition	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Nominal Max. Power (Pmax/W)	530	397	535	401	540	405	545	409	550	412	555	416
Opt. Operating Voltage (Vmp/V)	40.9	38.3	41.1	38.5	41.3	38.7	41.5	38.9	41.7	39.1	41.9	39.3
Opt. Operating Current (Imp/A)	12.96	10.38	13.02	10.42	13.08	10.47	13.14	10.52	13.20	10.55	13.25	10.59
Open Circuit Voltage (Voc/V)	48.8	46.1	49.0	46.3	49.2	46.5	49.4	46.7	49.6	46.9	49.8	47.1
Short Circuit Current (Isc/A)	13.80	11.13	13.85	11.17	13.90	11.21	13.95	11.25	14.00	11.29	14.05	11.33
Module Efficiency(%)	20.5	/	20.7	/	20.9	/	21.1	/	21.3	/	21.5	/
Operating Temperature	-40°C ~ +85°C											
Max. System Voltage	1500V (IEC/UL) or 1000V (IEC/UL)											
Module Fire Performance	TYPE 1 (UL 61730 1500V) or TYPE 2 (UL 61730 1000V) or CLASS C (IEC 61730)											
Max. Series Fuse Rating	25 A											
Application Classification	Class A											
Power Tolerance	0 ~ + 10 W											

Standard Test Condition(STC): Irradiance 1000W/m², Cell Temperature 25°C, AM1.5, Measuring Tolerance: ±3%.

Nominal Module Operating Temperature(NMOT): Irradiance 800W/m², Ambient Temperature 20°C, AM1.5, Wind Speed 1m/s.

Mechanical Data

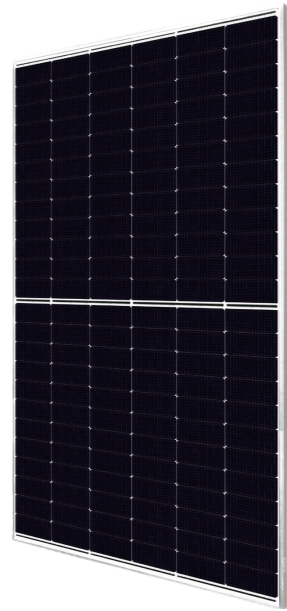
Cell Type	Mono-crystalline	J-Box	IP68, 3 bypass diodes
Cell Arrangement	144[2*(12*6)]	Cable	4mm ² (IEC), 12AWG(UL)
Dimensions	2278*1134*30mm (89.7*44.6*1.18 in)	Connector	T6 or MC4 or MC4-EVO2 or MC4-EVO2A
Front Cover	3.2 mm tempered glass with anti-reflective coating	Cable Length (Including Connector)	350mm(13.8 in)(+)/250mm(9.8 in)(-) or customized length
Weight	27.6kg (60.8 lbs)	Per Pallet	35 pieces
Frame	Anodized aluminium alloy	Per Container (40' HQ)	700pcs or 630pcs (only for US & Canada)

Temperature Characteristics

Temperature Coefficient (Pmax)	-0.34% / °C
Temperature Coefficient (Voc)	-0.26% / °C
Temperature Coefficient (Isc)	0.05% / °C
Nominal Module Operating Temperature	41±3°C



CanadianSolar TOPHiKu6 N-type TOPCon Technology



CS6W 560-585 T

Features:

- ❖ Module power up to 585 W
- ❖ Module efficiency up to 22.6 %
- ❖ Excellent anti-LeTID & anti-PID performance.
- ❖ Low power degradation, high energy yield
- ❖ Lower temperature coefficient (Pmax): -0.29%/°C, increases energy yield in hot climate
- ❖ Lower LCOE & system cost
- ❖ Minimizes micro-crack impacts
- ❖ Heavy snow load up to 5400 Pa, wind load up to 2400 Pa

Warranty:

12-year Enhanced Product Warranty on Materials and Workmanship

30-year Linear Power Performance Warranty

Electrical Data

Module Type	CS6W 560T		CS6W 565T		CS6W 570T		CS6W 575T		CS6W 580T		CS6W 585T	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Testing Condition	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Nominal Max. Power (Pmax/W)	560	424	565	427	570	431	575	435	580	439	585	443
Opt. Operating Voltage (Vmp/V)	42.3	40.0	42.5	40.2	42.7	40.4	42.9	40.6	43.1	40.7	43.3	40.9
Opt. Operating Current (Imp/A)	13.24	10.59	13.30	10.64	13.35	10.68	13.41	10.72	13.46	10.77	13.52	10.81
Open Circuit Voltage (Voc/V)	51.4	48.7	51.6	48.9	51.8	49.0	52.0	49.2	52.2	49.4	52.4	49.6
Short Circuit Current (Isc/A)	13.69	11.04	13.75	11.09	13.81	11.14	13.88	11.19	13.93	11.23	14.00	11.29
Module Efficiency(%)	21.7	/	21.9	/	22.1	/	22.3	/	22.5	/	22.6	/
Operating Temperature	-40°C ~ +85°C											
Max. System Voltage	1500V (IEC/UL) or 1000V (IEC/UL)											
Module Fire Performance	TYPE 1 (UL 61730 1500V) or TYPE 2 (UL 61730 1000V) or CLASS C (IEC 61730)											
Max. Series Fuse Rating	25 A											
Application Classification	Class A											
Power Tolerance	0 ~ + 10 W											

Standard Test Condition(STC): Irradiance 1000W/m², Cell Temperature 25°C, AM1.5, Measuring Tolerance: ±3%.

Nominal Module Operating Temperature(NMOT): Irradiance 800W/m², Ambient Temperature 20°C, AM1.5, Wind Speed 1m/s.

Mechanical Data

Cell Type	TOPCon cells	J-Box	IP68, 3 bypass diodes
Cell Arrangement	144[2*(12*6)]	Cable	4mm ² (IEC), 12AWG(UL)
Dimensions	2278*1134*30mm (89.7*44.6*1.18 in)	Connector	T6 or MC4 or MC4-EVO2 or MC4-EVO2A
Front Cover	3.2 mm tempered glass with anti-reflective coating	Cable Length (Including Connector)	350mm(13.8 in)(+)/250mm(9.8 in)(-) or customized length
Weight	27.6kg (60.8 lbs)	Per Pallet	35 pieces
Frame	Anodized aluminium alloy	Per Container (40' HQ)	700pcs or 630pcs (only for US & Canada)

Temperature Characteristics

Temperature Coefficient (Pmax)	-0.29% / °C
Temperature Coefficient (Voc)	-0.25% / °C
Temperature Coefficient (Isc)	0.05% / °C
Nominal Module Operating Temperature	41±3°C

