UNITED ENERGY | 合纵新能源

Delivery Easy and Secure Turnkey Energy Solutions

Solar Panel Catalogue 2024

A professional energy storage solution provider

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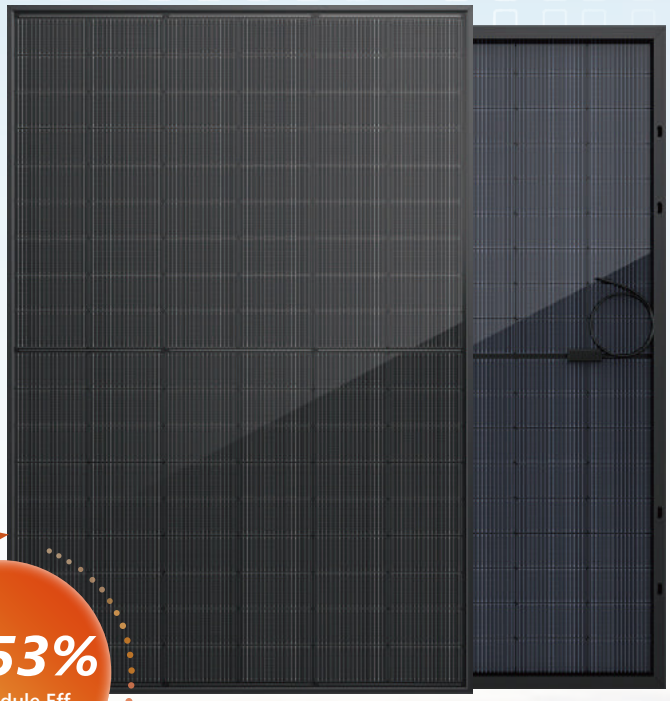
Delivering Easy and Secure Turnkey Energy Solutions

UNI T

UE440T-54HBD

420-440W

N-type TOPCon Bifacial Ultra black Dual Glass Solar Module



22.53%
Max Module Eff.

Positive power tolerance
(0-+5W) guaranteed

High module conversion efficiency
(up to 22.53%)

Slower power degradation
enabled by low LID Mono PERC technology: first year <1%, 0.40% year 2-30

Solid PID resistance
ensured by solar cell process optimization and careful module BOM selection

Reduced resistive loss
with lower operating current

Higher energy yield
with lower operating temperature

Reduced hot spot risk
with lower operating electrical design and lower operating current

Quality Management System and Product Certification

IEC 61215, IEC 61730, UL 61730

ISO9001: 2015: ISO Quality Management System.

ISO14001: 2015:ISO Environmental Management System.

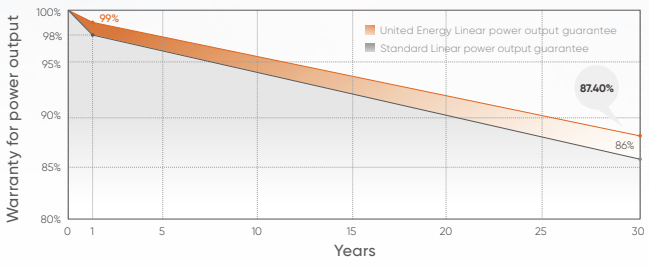
ISO45001: 2018: Occupation Health and Safety.

IEC62941:Guideline for module design qualification and type approval.

Quality Guarantee

15 year Materials Warranty

30 year Power Warranty



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UNI T 420~440W

Electrical Parameters(STC*)

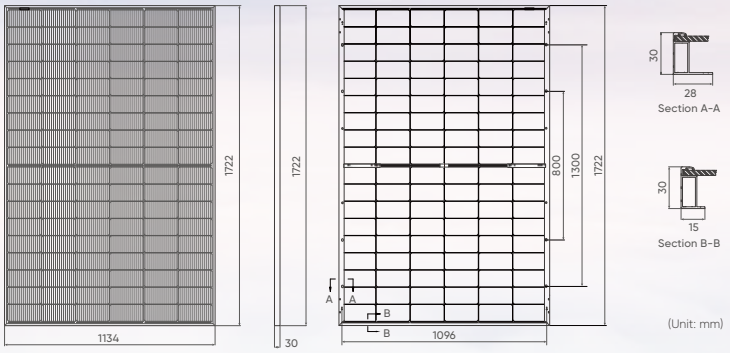
Module Type	420	425	430	435	440
Maximum power (Pmax/W)	420	425	430	435	440
Open Circuit Voltage (Voc/V)	38.49	38.73	38.96	39.20	39.44
Short Circuit Current (Isc/A)	13.99	14.06	14.13	14.20	14.27
Voltage at Maximum power (Vmpp/V)	31.63	31.84	32.04	32.25	32.45
Current at Maximum Power (Imp/A)	13.28	13.35	13.42	13.49	13.56
Module Efficiency(%)	21.51	21.76	22.02	22.28	22.53

Bifacial Output Rear side Power Gain

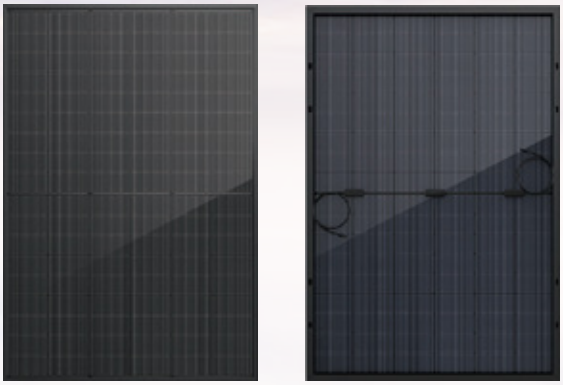
5%	Maximum power (Pmax/W)	441	446	452	457	462
	Module Efficiency STC (%)	22.58	22.85	23.12	23.36	23.63
15%	Maximum power (Pmax/W)	483	489	495	500	506
	Module Efficiency STC (%)	24.73	25.03	25.32	25.59	25.88
25%	Maximum Power (Pmax/W)	525	531	538	544	550
	Module Efficiency STC (%)	26.89	27.21	27.53	27.82	28.14

1. Standard Test Conditions [STC]: irradiance 1000W/m²; AM 1.5; ambient temperature 25°C according to EN 60904-3;
2. Tolerance of Pm: 0~+5W, Measuring uncertainty of power: ±3%. Performance deviation of Voc [V], Isc [A], Vm [V] and Im [A]: ±3%.

Design(mm)



Product Image



Design(mm)

Solar Cells	N-type Mono
No. of Cells	108 (6×18)
Dimensions	1722 × 1134 × 30mm
Weight	23.5kg
Glass	Front: 2.0mm coated semi-tempered glass; Back:2.0mm semi-tempered glass
Frame	Anodized aluminium alloy
Junction Box	Ip68 rated (3 Bypass Diodes)
Output Cables	4mm², 300mm (+) / 300mm (-), Length can be customized
Connectors	Mc4 compatible
Mechanical load test	5400Pa
Packaging	36pcs/box, 936pcs/40'HQ

Operating Characteristics

Operating Module Temperature	-40°C to +85°C
Maximun System Voltage	1500V DC (IEC)
Maximun Series Fuse Rating	30A
Power Tolerance	0/+5W

Temperature Characteristics

Nominal Operating Temperature (NMOT)	45±2°C
Temperature Coefficient of Pmax	-0.29%°C
Temperature Coefficient of Voc	-0.25%°C
Temperature Coefficient of Isc	+0.045%°C

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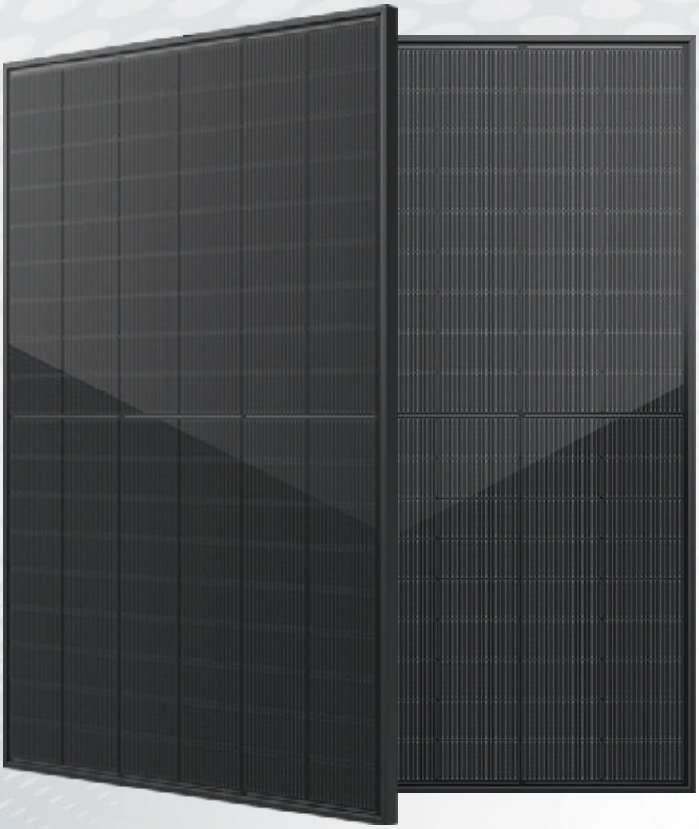
HETERO JUNCTION TECHNOLOGY



UNI H

UE450H-54HBD

N-type HJT Bifacial Dual Glass Solar Module

HJT 2.0 Technology

Combining gettering process and single-side μc-Si technology to ensure higher cell efficiency and higher module power.

-0.26%/°C Pmax temperature coefficient

More stable power generation performance and even better in hot climate.

SMBB design with Half-Cut Technology

Shorter current transmission distance, less resistive loss and higher cell efficiency.

Up to 90% Bifaciality

Natrual symmetrical bifacial structure bringing more energy yield from the backside.

Sealing with PIB based sealant

Stronger water resistance, greater air impermeability to extent module lifespan.

430-450W

Max Efficiency 23.04%

Quality Management System and Product Certification

IEC 61215, IEC 61730, UL 61730

ISO9001: 2015: ISO Quality Management System.

ISO14001: 2015:ISO Environmental Management System.

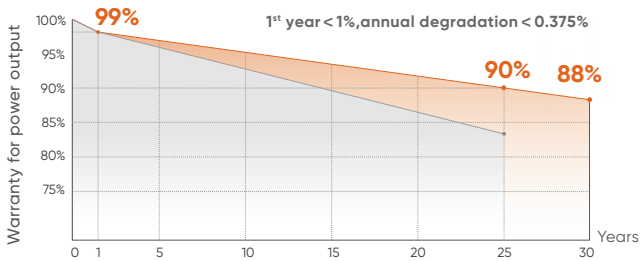
ISO45001: 2018: Occupation Health and Safety.

IEC62941:Guideline for module design qualification and type approval.

Quality Guarantee

15 Year Materials Warranty

30 Year Power Warranty



Less than 1% attenuation in the 1st year, the annual attenuation from the 2nd year is no more than 0.375% , and the power is no less than 88% until the 30th year.

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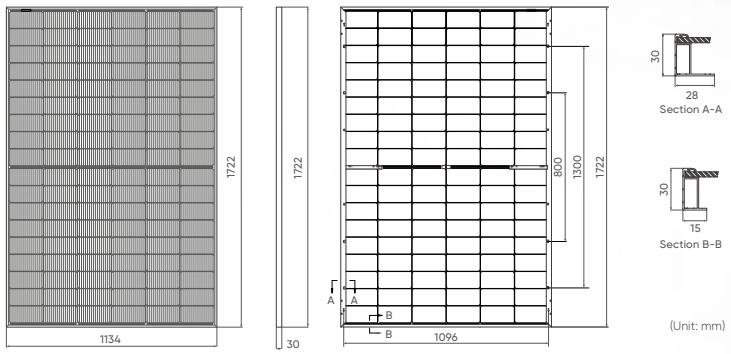
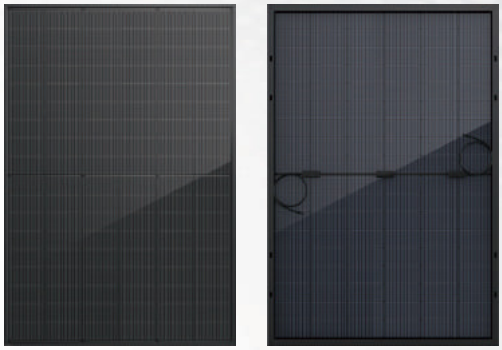
UNI H 430-450W

Drawings



Product Image



Mechanical Characteristics

Solar Cells	HJT Mono 182×91.75mm
No. of Cells	108 (6×18)
Dimensions	1722 × 1134 × 30mm
Weight	23.5kg
Glass Thickness	(F) 2.0mm anti-reflective solar glass | (B) 2.0mm solar glass
Frame	Anodized aluminium alloy
Junction Box	IP68
Output Cables	4mm², 300mm in length, length can be customized / UV resistant
Connectors	MC4 original /MC4 compatible
Mechanical load test	5400Pa
Packaging	36pcs/box, 936pcs/40'HQ

Operating Characteristics

Operating Module Temperature	-40°C ~ +85°C
Maximun System Voltage	DC 1500 (IEC)
Maximun Series Fuse Rating	30A
Power Tolerance	0~+5W
Bifaciality	85%±5%

Temperature Characteristics

Nominal Operating Cell Temp. (NOCT)	44±2°C
Temperature Coefficient of Pmax	-0.26%°C
Temperature Coefficient of Voc	-0.24%°C
Temperature Coefficient of Isc	0.04%°C

Electrical Parameters (STC*)

Module Type:	430	435	440	445	450
Maximum Power (Pmax/W)	430	435	440	445	450
Module Efficiency (%)	22.02	22.28	22.53	22.79	23.04
Optimum Operating Voltage (Vmp/V)	34.60	34.86	35.12	35.38	35.63
Optimum Operating Current (Imp/A)	12.43	12.48	12.53	12.58	12.63
Open Circuit Voltage (Voc/V)	41.37	41.64	41.91	42.18	42.44
Short Circuit Current (Isc/A)	12.95	13.00	13.05	13.10	13.15

BSTC*

Maximum Power (Pmax/W)	473	479	484	489.5	495
Optimum Operating Voltage (Vmp/V)	34.60	34.86	35.12	35.38	35.63
Optimum Operating Current (Imp/A)	13.67	13.73	13.78	13.84	13.89
Open Circuit Voltage (Voc/V)	41.37	41.64	41.91	42.18	42.44
Short Circuit Current (Isc/A)	14.25	14.30	14.35	14.41	14.47

*STC: Irradiance 1000 W/m2, cell temperature 25°C, AM=1.5. Tolerance of Pmax is within +/- 3%.

*BSTC: Front side irradiation 1000W/m2, back side reflection irradiation 135W/m2, AM=1.5, ambient temperature 25°C.

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UNI T

UE450T-54HBD

430-450W

N-type TOPCon Bifacial Black Frame Dual Glass Solar Module

23.04%
Max Module Eff.

Positive power tolerance
(0-+5W) guaranteed

High module conversion efficiency
(up to 23.04%)

Slower power degradation
enabled by low LID Mono PERC technology: first year <1%, 0.40% year 2-30

Solid PID resistance
ensured by solar cell process optimization and careful module BOM selection

Reduced resistive loss
with lower operating current

Higher energy yield
with lower operating temperature

Reduced hot spot risk
with lower operating electrical design and lower operating current

Quality Management System and Product Certification

IEC 61215, IEC 61730, UL 61730

ISO9001: 2015: ISO Quality Management System.

ISO14001: 2015:ISO Environmental Management System.

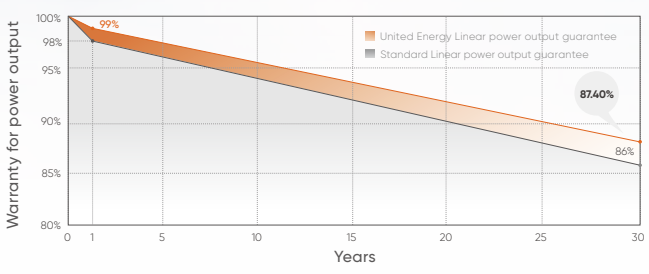
ISO45001: 2018: Occupation Health and Safety.

IEC62941:Guideline for module design qualification and type approval.

Quality Guarantee

15 year Materials Warranty

30 year Power Warranty



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UNI T 430~450W

Electrical Parameters(STC*)

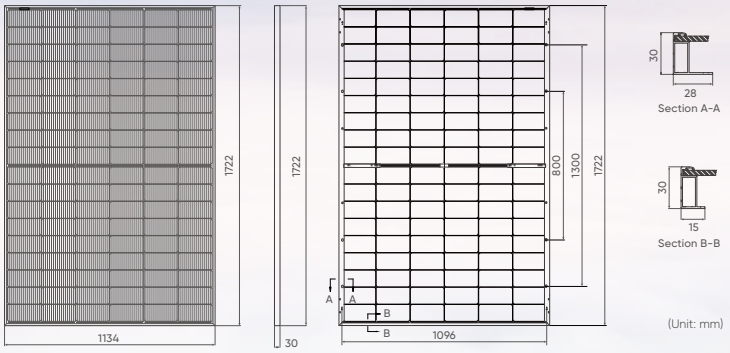
Module Type	430	435	440	445	450
Maximum power (Pmax/W)	430	435	440	445	450
Open Circuit Voltage (Voc/V)	38.96	39.20	39.44	39.68	39.92
Short Circuit Current (Isc/A)	14.13	14.20	14.27	14.34	14.41
Voltage at Maximum power (Vmpp/V)	32.04	32.25	32.45	32.66	32.86
Current at Maximum Power (Imp/A)	13.42	13.49	13.56	13.63	13.70
Module Efficiency(%)	22.02	22.28	22.53	22.79	23.04

Bifacial Output Rear side Power Gain

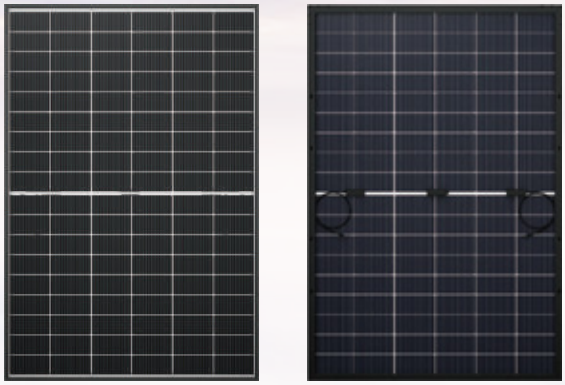
5%	Maximum power (Pmax/W)	452	457	462	467	473
	Module Efficiency STC (%)	23.12	23.36	23.63	23.93	24.20
15%	Maximum power (Pmax/W)	495	500	506	512	518
	Module Efficiency STC (%)	25.32	25.59	25.88	26.20	26.50
25%	Maximum Power (Pmax/W)	538	544	550	556	563
	Module Efficiency STC (%)	27.53	27.82	28.14	28.50	28.80

1. Standard Test Conditions [STC]: irradiance 1000W/m²; AM 1.5; ambient temperature 25°C according to EN 60904-3;
2. Tolerance of Pm: 0~+5W, Measuring uncertainty of power: ±3%. Performance deviation of Voc [V], Isc [A], Vm [V] and Im [A]: ±3%.

Design(mm)



Product Image



Design(mm)

Solar Cells	N-type Mono
No. of Cells	108 (6×18)
Dimensions	1722 × 1134 × 30mm
Weight	23.5kg
Glass	Front: 2.0mm coated semi-tempered glass; Back:2.0mm semi-tempered glass
Frame	Anodized aluminium alloy
Junction Box	Ip68 rated (3 Bypass Diodes)
Output Cables	4mm², 300mm (+) / 300mm (-), Length can be customized
Connectors	Mc4 compatible
Mechanical load test	5400Pa
Packaging	36pcs/box, 936pcs/40'HQ

Operating Characteristics

Operating Module Temperature	-40°C to +85°C
Maximun System Voltage	1500V DC (IEC)
Maximun Series Fuse Rating	30A
Power Tolerance	0/+5W

Temperature Characteristics

Nominal Operating Temperature (NMOT)	45±2°C
Temperature Coefficient of Pmax	-0.29%°C
Temperature Coefficient of Voc	-0.25%°C
Temperature Coefficient of Isc	+0.045%°C

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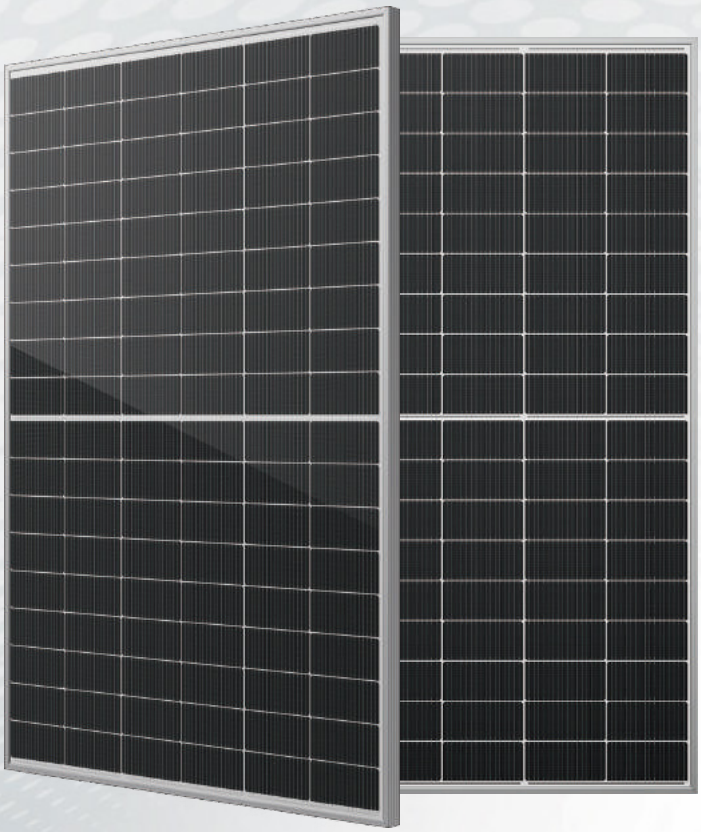
HETERO JUNCTION TECHNOLOGY



UNI H

UE460H-54H

N-type HJT Monofacial Solar Module

HJT 2.0 Technology

Combining gettering process and single-side μc-Si technology to ensure higher cell efficiency and higher module power.

-0.26%/°C Pmax temperature coefficient

More stable power generation performance and even better in hot climate.

SMBB design with Half-Cut Technology

Shorter current transmission distance, less resistive loss and higher cell efficiency.

Up to 90% Bifaciality

Natrual symmetrical bifacial structure bringing more energy yield from the backside.

Sealing with PIB based sealant

Stronger water resistance, greater air impermeability to extent module lifespan.

440-460W

Max Efficiency 23.56%

Quality Management System and Product Certification

IEC 61215, IEC 61730, UL 61730

ISO9001: 2015: ISO Quality Management System.

ISO14001: 2015:ISO Environmental Management System.

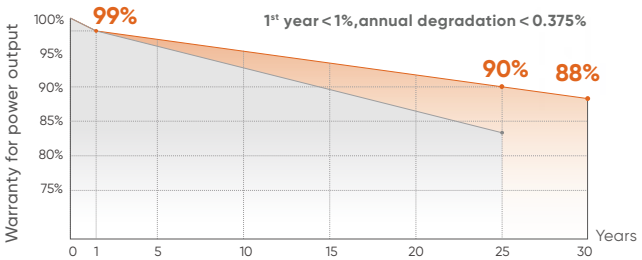
ISO45001: 2018: Occupation Health and Safety.

IEC62941:Guideline for module design qualification and type approval.

Quality Guarantee

15 Year Materials Warranty

30 Year Power Warranty



Less than 1% attenuation in the 1st year, the annual attenuation from the 2nd year is no more than 0.375%, and the power is no less than 88% until the 30th year.

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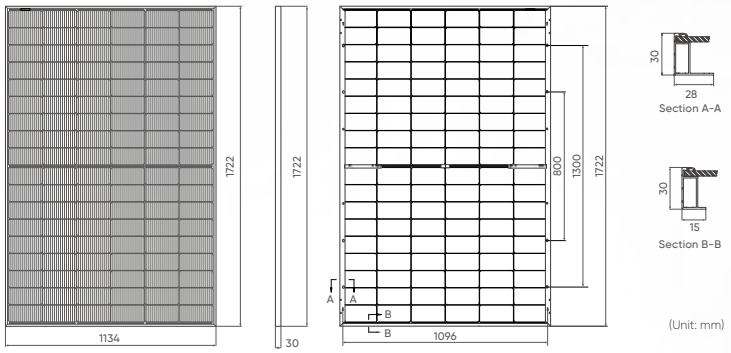
UNI H 440-460W

Drawings



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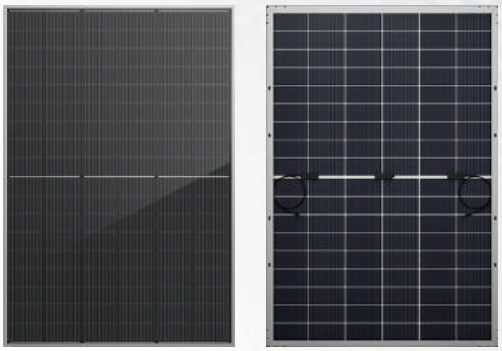

Mechanical Characteristics

Solar Cells	HJT Mono 182×91.75mm
No. of Cells	108 (6×18)
Dimensions	1722 × 1134 × 30mm
Weight	23.5kg
Glass Thickness	(F) 2.0mm anti-reflective solar glass
Frame	Anodized aluminium alloy
Junction Box	IP68
Output Cables	4mm², 300mm in length, length can be customized / UV resistant
Connectors	MC4 original /MC4 compatible
Mechanical load test	5400Pa
Packaging	36pcs/box, 936pcs/40'HQ

Operating Characteristics

Operating Module Temperature	-40°C ~ +85°C
Maximun System Voltage	DC 1500 (IEC)
Maximun Series Fuse Rating	30A
Power Tolerance	0~+5W
Bifaciality	85%±5%

Temperature Characteristics

Nominal Operating Cell Temp. (NOCT)	44±2°C
Temperature Coefficient of Pmax	-0.26%°C
Temperature Coefficient of Voc	-0.24%°C
Temperature Coefficient of Isc	0.04%°C

Electrical Parameters (STC*)

Module Type:	440	445	450	455	460
Maximum Power (Pmax/W)	440	445	450	455	460
Module Efficiency (%)	22.53	22.79	23.04	23.30	23.56
Optimum Operating Voltage (Vmp/V)	35.12	35.38	35.64	35.89	36.13
Optimum Operating Current (Imp/A)	12.53	12.58	12.63	12.68	12.73
Open Circuit Voltage (Voc/V)	41.91	42.18	42.44	42.70	42.96
Short Circuit Current (Isc/A)	13.05	13.10	13.15	13.20	13.25

BSTC*

Maximum Power (Pmax/W)	473	479	484	489.5	495
Optimum Operating Voltage (Vmp/V)	34.60	34.86	35.12	35.38	35.63
Optimum Operating Current (Imp/A)	13.67	13.73	13.78	13.84	13.89
Open Circuit Voltage (Voc/V)	41.37	41.64	41.91	42.18	42.44
Short Circuit Current (Isc/A)	14.25	14.30	14.35	14.41	14.47

*STC: Irradiance 1000 W/m2, cell temperature 25°C, AM=1.5. Tolerance of Pmax is within +/- 3%.

*BSTC: Front side irradiation 1000W/m2, back side reflection irradiation 135W/m2, AM=1.5, ambient temperature 25°C.

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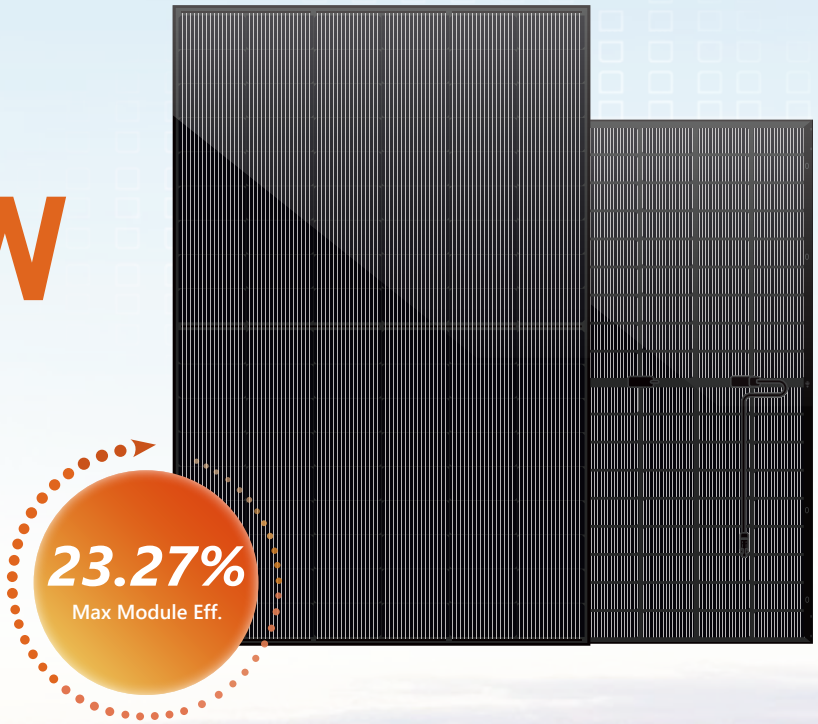
UNI T

UE465T-54HBD

450-465W

N-type TOPCon Bifacial Solar Module



- SMBB Technology Half Cut TOPCon Cell
- High Energy Performance
- 100% Inspection 30years Guarantee
- Fire Class A
- Strengthened Mechanical Load
- Advanced Bifacial Efficiency

Quality Management System and Product Certification

IEC 61215, IEC 61730, UL 61730

ISO9001: 2015: ISO Quality Management System.

ISO14001: 2015:ISO Environmental Management System.

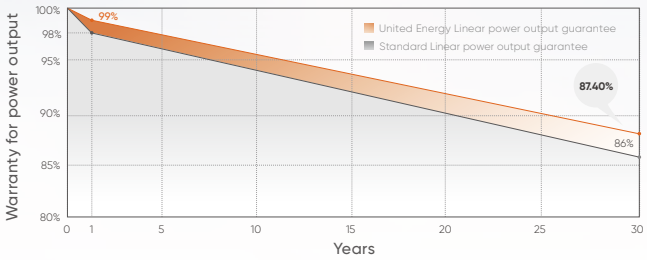
ISO45001: 2018: Occupation Health and Safety.

IEC62941:Guideline for module design qualification and type approval.

Quality Guarantee

12 year Materials Warranty

30 year Power Warranty



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UNI T 450~465W

Electrical Characteristics (STC/NOCT)

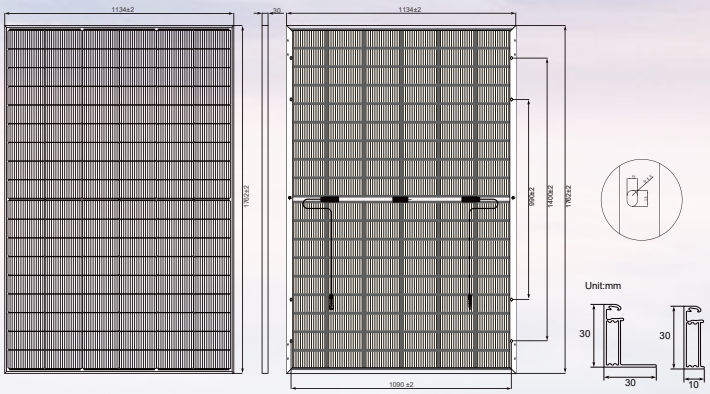
Module Type	UE450T-54HBD		UE455T-54HBD		UE460T-54HBD		UE465T-54HBD	
Front Side	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power- Pmax(W)	450	339	455	343	460	347	465	351
Open Circuit Voltage - Voc(V)	39.80	37.81	40.02	38.01	40.24	38.21	40.46	38.41
Short- Circuit Current - Isc(A)	13.98	11.29	14.04	11.34	14.10	11.39	14.16	11.44
Voltage at Pmax -Vmp(V)	33.19	31.03	33.39	31.26	33.59	31.49	33.79	31.72
Current at Pmax - Imp(A)	13.56	10.93	13.63	10.98	13.70	11.03	13.77	11.08
Module Efficiency -ηm(%)	22.52		22.77		23.02		23.27	

STC ： Irradiance 1000W/m², Cell Temperature 25°C, Air Mass 1.5

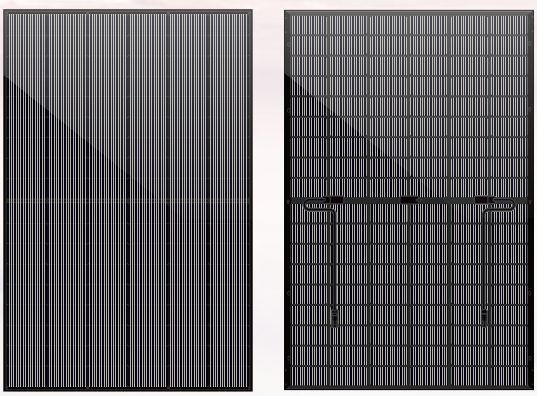
Bifacial Output Rear side Power Gain

5%	Maximum power (Pmax/W)	473	478	483	488
	Module Efficiency STC (%)	23.67	23.92	24.17	24.42
15%	Maximum power (Pmax/W)	518	523	529	535
	Module Efficiency STC (%)	25.92	26.17	26.48	26.78
25%	Maximum power (Pmax/W)	563	569	575	581
	Module Efficiency STC (%)	28.18	28.48	28.78	29.08

Design(mm)



Product Image



Mechanical Specifications

External Dimensions	1762x1134x30mm
Weight	22kg
Solar Cells	N-Type 16BB 182x94mm (2x54pcs)
Front Glass	Front: 2.0mm coated semi-tempered glass; Back:2.0mm semi-tempered glass
Frame	Anodized aluminum alloy
Junction Box	IP68
Output Cables	4.0mm², 300mm (+),300mm (-), length can be customized
Connector	MC4 Compatible
Mechanical Load	Front Side Max. 5400Pa, Rear Side Max. 2400Pa
Power Tolerance(W)	(0 ~+5W)
Maximum System Voltage(V)	1500Vdc (IEC / UL)
Maximum Series Fuse Rating (A)	30A

Packing Configuration

Container	40'HQ
Pieces per Pallet	36
Pallets per Container	26
Pieces per Container	936

Temperature Characteristics

Pmax Temperature Coefficient	-0.290%/°C
Voc Temperature Coefficient	-0.250%/°C
Isc Temperature Coefficient	+0.045%/°C
Operating Temperature	-40~+85°C
Nominal Operating Cell Temperature(NOCT)	45±2°C

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United Energy Co., LTD

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Delivering Easy and Secure Turnkey Energy Solutions

HETERO JUNCTION TECHNOLOGY

UNI H

UE475H -48HBD

96-Cell HJT Bifacial Double-glass Solar Module

HJT 3.0

Combining gettering process and double-sided μc-Si to maximize cell efficiency and module power.

Up to 90% Bifaciality

Natrual symmetrical bifacial structure bringing more energy yield from the backside.

Sealing with PIB based sealant

Stronger water resistance, greater air impermeability to extent module lifespan.

Higher reliability

Industrial leading product and performance warranty, ensuring modules' consistent outstanding performance.

Ideal choice for solar rooftop system

Suitable for various rooftop projects.

460-475W

Max Efficiency 23.77%

Quality Management System and Product Certification

IEC 61215, IEC 61730, UL 61730

ISO9001: 2015: ISO Quality Management System.

ISO14001: 2015:ISO Environmental Management System.

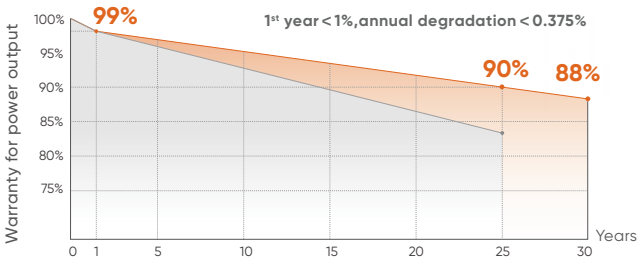
ISO45001: 2018: Occupation Health and Safety.

IEC62941:Guideline for module design qualification and type approval.

Quality Guarantee

15 Year Materials Warranty

30 Year Power Warranty



Less than 1% attenuation in the 1st year, the annual attenuation from the 2nd year is no more than 0.375%, and the power is no less than 88% until the 30th year.

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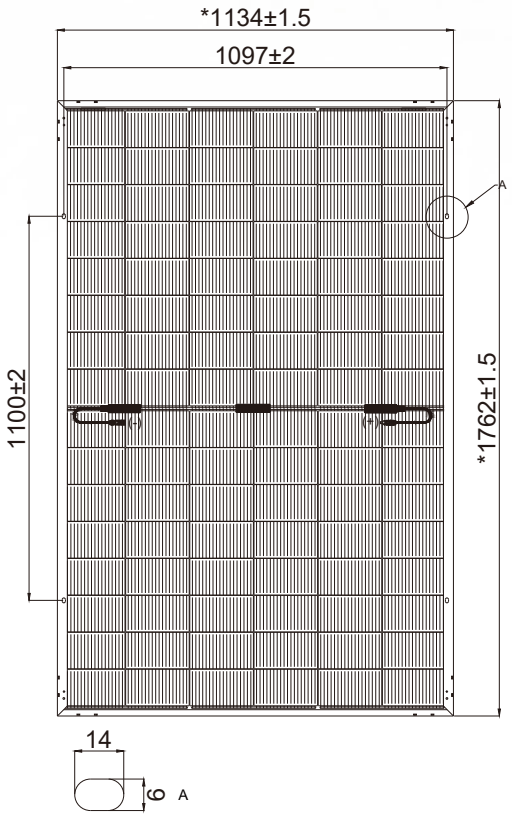
UNI H 460-475W

Engineering Drawings



Temperature Characteristics

Nominal Operating Cell Temp. (NOCT)	44 °C ±2 °C
Temperature Coefficient of Pmax	-0.26%/ °C
Temperature Coefficient of Voc	-0.24%/ °C
Temperature Coefficient of Isc	0.04%/ °C

Safety & Warranty

Safety Class	Class II
Product Warranty	15 yrs Workmanship
Performance Warranty	30 yrs Linear Warranty*

* Less than 1% attenuation in the 1st year, the annual attenuation from the 2nd year is no more than 0.375%, and the power is no less than 88% until the 30th year.

Shipping Configurations

Container Size		40'HQ
Pallets Per Container	(pcs)	26
Modules Per Pallet	(pcs)	36
Modules Per Container		936

Electrical Characteristics (STC*)

UE475H-48HBD		UE460	UE465	UE470	UE475
Maximum Power	(Pmax)	460W	465W	470W	475W
Module Efficiency	(%)	23.02%	23.27%	23.52%	23.77%
Optimum Operating Voltage	(Vmp)	31.05V	31.20V	31.35V	31.50V
Optimum Operating Current	(Imp)	14.82A	14.91A	15.01A	15.10A
Open Circuit Voltage	(Voc)	36.93V	37.09V	37.25V	37.41V
Short Circuit Current	(Isc)	15.52A	15.61A	15.70A	15.79A
Operating Module Temperature		-40 to +85 °C			
Maximum System Voltage		DC1500V (IEC)			
Maximum Series Fuse		30A			
Power Tolerance		0~+5W			
Bifaciality		85% ±5%			

*STC: Irradiance 1000 W/m ², cell temperature 25 °C, AM=1.5. Tolerance of Pmax is within +/- 3%.

BSTC**

Maximum Power	(Pmax)	512W	518W	523W	529W
Optimum Operating Voltage	(Vmp)	31.16V	31.31V	31.46V	31.61V
Optimum Operating Current	(Imp)	16.46A	16.57A	16.67A	16.78A
Open Circuit Voltage	(Voc)	37.06V	37.22V	37.38V	37.54V
Short Circuit Current	(Isc)	17.30A	17.40A	17.50A	17.60A

**BSTC: Front side irradiation 1000W/m ², back side reflection irradiation 135W/m², AM=1.5, ambient temperature 25 °C.

NOCT**

Maximum Power	(Pmax)	349W	352W	356W	359W
Optimum Operating Voltage	(Vmp)	29.54V	29.68V	29.82V	29.96V
Optimum Operating Current	(Imp)	11.84A	11.91A	11.98A	12.05A
Open Circuit Voltage	(Voc)	35.25V	35.41V	35.57V	35.73V
Short Circuit Current	(Isc)	12.40A	12.47A	12.54A	12.61A

**NOCT: Irradiance 800W/m ², Ambient Temperature 20 °C, Wind Speed 1m/s.

Mechanical Characteristics

Cell Type	HJT Mono 182 ×105mm
Cell Connection	96 (6 ×16)
Module Dimension	1762 x 1134 x30 mm
Weight	23 kg
Junction Box	IP68
Output Cable	4mm², 300mm in length, length can be customized / UV resistant
Connectors Type	MC4 original / MC4 compatible
Frame	Anodised aluminum alloy(Black)
Front Load	5400 Pa
Rear Load	2400 Pa
Glass Thickness	Double glass, 1.6mm

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HETERO JUNCTION TECHNOLOGY

UNI H

UE525H-54HBD

N-type HJT Bifacial Ultra black Dual Glass Solar Module

HJT Technology

Combining gettering process and double-sided μc-Si to improve cell efficiency and module power.

Up to 95% Bifaciality

Natrual symmetrical bifacial structure bringing more energy yield from the backside.

Sealing with PIB

Stronger water resistance, greater air impermeability to extent module lifespan.

Ideal choice for solar rooftop system

Suitable for various rooftop projects

500-525W

Max Efficiency 23.60%

Quality Management System and Product Certification

IEC 61215, IEC 61730, UL 61730

ISO9001: 2015: ISO Quality Management System.

ISO14001: 2015:ISO Environmental Management System.

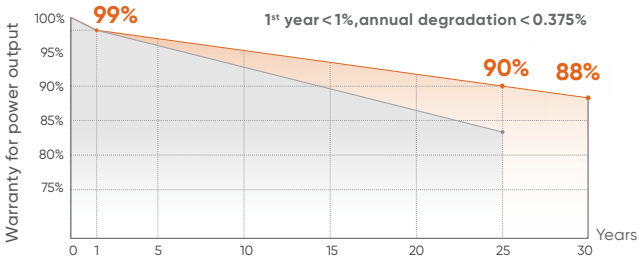
ISO45001: 2018: Occupation Health and Safety.

IEC62941:Guideline for module design qualification and type approval.

Quality Guarantee

15 Year Materials Warranty

30 Year Power Warranty



Less than 1% attenuation in the 1st year, the annual attenuation from the 2nd year is no more than 0.375%, and the power is no less than 88% until the 30th year.

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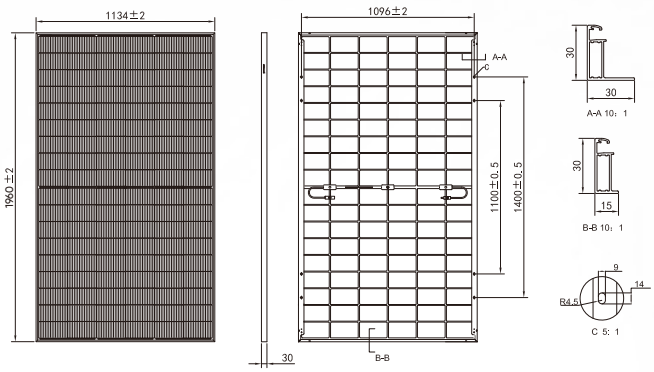
UNI H 500-525W

Drawings



Product Image

Mechanical Characteristics

Solar Cells	N-type HJT
No. of Cells	108 (6×18)
Dimensions	1960 × 1134 × 30mm
Weight	27.4kg
Glass	Dual glass, 2.0mm
Frame	Anodized aluminium alloy
Junction Box	Ip68
Output Cables	4mm², 1250mm or customized; UV resistant
Connectors	MC4/ MC4-Evo2A/ PV-H4/ Z4S-abcd/ ST4
Mechanical load test	5400Pa/2400Pa
Packaging	36pcs/box, 864pcs/40'HQ

Operating Characteristics

Operating Module Temperature	-40°C to +85°C
Maximun System Voltage	DC1500V(IEC)
Maximun Series Fuse Rating	30A
Power Tolerance	0/+5W

Temperature Characteristics

Nominal Operating Temperature (NMOT)	44±2°C
Temperature Coefficient of Pmax	-0.24%°C
Temperature Coefficient of Voc	-0.22%°C
Temperature Coefficient of Isc	+0.04%°C

Electrical Characteristics (STC*)

Module Type	500	505	510	515	520	525
Maximum Power (Pmax/W)	500	505	510	515	520	525
Module Efficiency (%)	22.50	22.70	22.90	23.20	23.40	23.60
Voltage at Maximum power (Vmp/V)	34.16	34.27	34.38	34.49	34.60	34.71
Current Maximum Power (Imp/A)	14.64	14.74	14.84	14.94	15.04	15.14
Open Circuit Voltage (Voc/V)	40.76	40.87	40.98	41.09	41.20	41.31
Short Circuit Current (Isc/A)	15.48	15.59	15.70	15.81	15.92	16.03

Electrical Characteristics (NOTC*)

Maximum Power (Pmax/W)	381	385	389	393	397	400
Voltage at Maximum power (Vmp/V)	32.63	32.73	32.83	32.93	33.03	33.13
Current Maximum Power (Imp/A)	11.70	11.78	11.86	11.94	12.02	12.10
Open Circuit Voltage (Voc/V)	38.90	39.01	38.11	39.22	39.32	39.43
Short Circuit Current (Isc/A)	12.37	12.46	12.55	12.64	12.72	12.81

1. Standard Test Conditions [STC]: irradiance 1000W/m²; AM 1.5; ambient temperature 25°C according to EN 60904-3;
2. Tolerance of Pm: 0~+5W, Measuring uncertainty of power: ±3%. Performance deviation of Voc [V], Isc [A], Vm [V] and Im [A]: ±3%.

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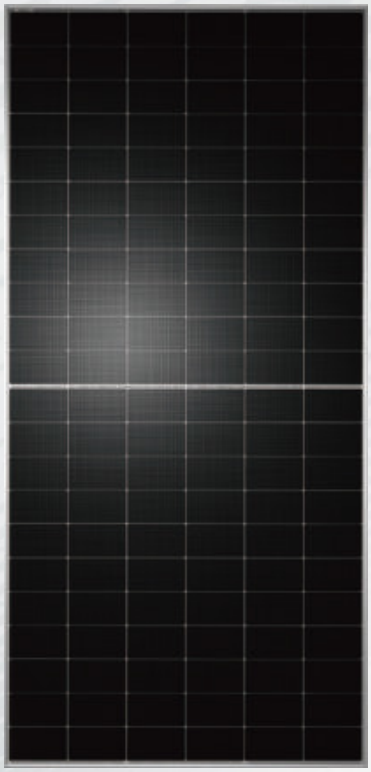


UNI H

UE635H-66HBD

N-type HJT Bifacial Dual Glass Solar Module

HJT Technology

Combining gettering process and double-sided μc-Si to improve cell efficiency and module power.

Suitable for Utility project

Lower BOS cost, lower LCOE.

Up to 95% Bifaciality

Natrual symmetrical bifacial structure bringing more energy yield from the backside.

Sealing with PIB

Stronger water resistance, greater air impermeability to extent module lifespan.

600-635W

Max Efficiency 23.50%

Quality Management System and Product Certification

IEC 61215, IEC 61730, UL 61730

ISO9001: 2015: ISO Quality Management System.

ISO14001: 2015:ISO Environmental Management System.

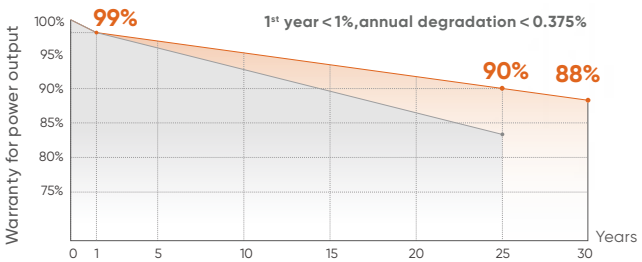
ISO45001: 2018: Occupation Health and Safety.

IEC62941:Guideline for module design qualification and type approval.

Quality Guarantee

15 Year Materials Warranty

30 Year Power Warranty



Less than 1% attenuation in the 1st year, the annual attenuation from the 2nd year is no more than 0.375%, and the power is no less than 88% until the 30th year.

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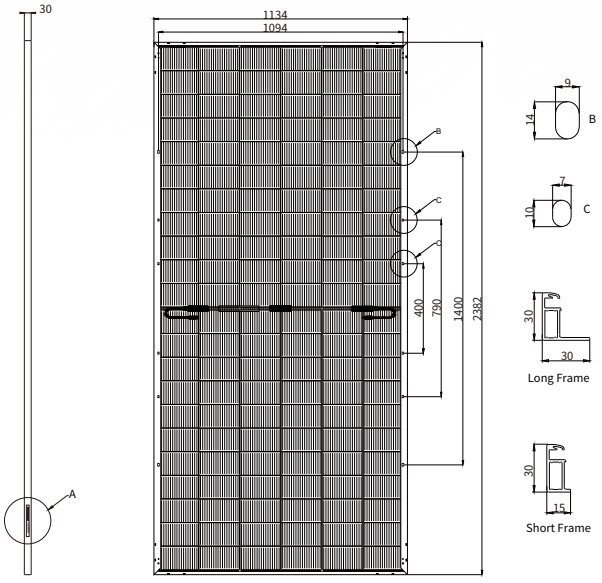
UNI H 600-635W

Drawings



Operating Characteristics

Operating Module Temperature	-40°C to +85°C
Maximun System Voltage	DC1500V(IEC)
Maximun Series Fuse Rating	30A
Power Tolerance	0/+5W

Temperature Characteristics

Nominal Operating Temperature (NMOT)	44±2°C
Temperature Coefficient of Pmax	-0.24%°C
Temperature Coefficient of Voc	-0.22%°C
Temperature Coefficient of Isc	+0.04%°C

Mechanical Characteristics

Solar Cells	N-type HJT
No. of Cells	132 (6×22)
Dimensions	2382 × 1134 × 30mm
Weight	32.6kg
Glass	Dual glass, 2.0mm
Frame	Anodized aluminium alloy frame
Junction Box	Ip68
Output Cables	4mm², 350mm (+) / 250mm (-)or customized; UV resitant
Connectors	MC4/ MC4-Evo2A/ PV-H4/ Z4S-abcd/ ST4
Mechanical load test	5400Pa/2400Pa
Packaging	36pcs/box, 720pcs/40'HQ

Electrical Characteristics (STC)

Maximum Power (Pmax/W)	600	605	610	615	620	625	630	635
Module Efficiency (%)	22.20	22.40	22.60	22.80	23.00	23.10	23.30	23.50
Voltage at Maximum power (Vmp/V)	40.69	40.78	40.85	40.96	41.05	41.14	41.23	41.32
Current Maximum Power (Imp/A)	14.76	14.85	14.95	15.03	15.12	15.21	15.30	15.39
Open Circuit Voltage (Voc/V)	48.75	48.85	48.94	49.05	49.15	49.25	49.34	49.43
Short Circuit Current (Isc/A)	15.56	15.66	15.76	15.86	15.96	16.06	16.16	16.26

Electrical Characteristics (BSTC)

Maximum Power (Pmax/W)	672	678	684	689	695	700	706	712
Voltage at Maximum power (Vmp/V)	40.83	40.92	40.99	41.10	41.19	41.28	41.37	41.46
Current Maximum Power (Imp/A)	16.48	16.58	16.69	16.78	16.88	16.98	17.08	17.18
Open Circuit Voltage (Voc/V)	48.92	49.02	49.11	49.22	49.32	49.42	49.51	49.60
Short Circuit Current (Isc/A)	17.45	17.56	17.67	17.79	17.90	18.01	18.12	18.24

Electrical Characteristics (NOCT)

Maximum Power (Pmax/W)	458	461	465	469	473	477	481	484
Voltage at Maximum power (Vmp/V)	38.84	38.92	38.98	39.09	39.18	39.26	39.34	39.42
Current Maximum Power (Imp/A)	11.80	11.87	11.95	12.01	21.08	12.16	12.23	12.30
Open Circuit Voltage (Voc/V)	46.53	46.62	46.71	46.82	46.91	47.01	47.09	47.18
Short Circuit Current (Isc/A)	12.44	12.52	12.60	12.68	12.76	12.84	12.92	13.00

1. Standard Test Conditions [STC]: irradiance 1000W/m²; AM 1.5; ambient temperature 25°C according to EN 60904-3;
2. Tolerance of Pm: 0~+5W, Measuring uncertainty of power: ±3%. Performance deviation of Voc [V], Isc [A], Vm [V] and Im [A]: ±3%.

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UNI S N-TYPE

UE480M-48H

Shingled Monofacial Ultra Black PV Module

Shingling Technology
Innovative Structure,low-temperature adhesive bonding, high-density layout.

Beautiful Appearance
Uniform layout, better aesthetic.

Superior Safety and Reliability
No hidden welding crack, low operating temperature, high pressure resistance.

Low System Cost
High module efficiency, reducing system cost.

Low Hot Spot Risk
Parallel circuit design reduces shading loss. module lifespan.

Eco-friendly
Adhering to green philosophy, no fluorine and low lead.

Low Shading Loss
Full parallel arrangement brings high effective power generation hours.

470-490W

23.5% Max Efficiency

Quality Management System and Product Certification

IEC 61215, IEC 61730, UL 61730

ISO9001: 2015: ISO Quality Management System.

ISO14001: 2015:ISO Environmental Management System.

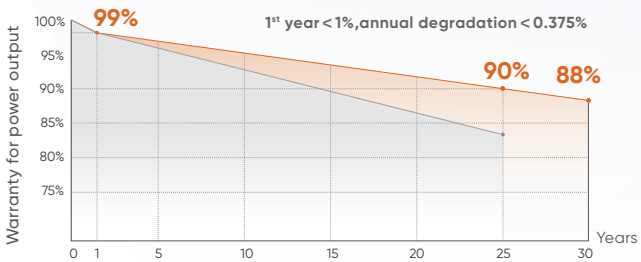
ISO45001: 2018: Occupation Health and Safety.

IEC62941:Guideline for module design qualification and type approval.

Quality Guarantee

15 Year Materials Warranty

30 Year Power Warranty



Less than 1% attenuation in the 1st year, the annual attenuation from the 2nd year is no more than 0.375%, and the power is no less than 88% until the 30th year.

United Energy Co., Ltd.

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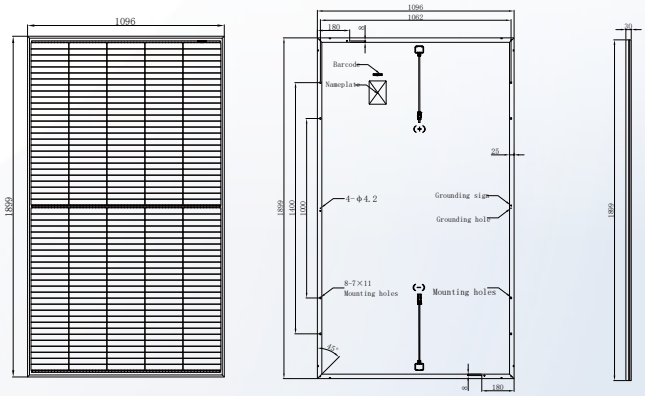
UNI S 470-490W

Drawings



Product Image

Mechanical Characteristics

Solar Cells	Mono-crystalline silicon
No. of Cells	270 (27×2×5)
Dimensions	1899 × 1096 × 30mm
Weight	21.8kg
Glass Thickness	3.2mm high transmittance tempered glass
Frame	Anodized aluminium alloy
Junction Box	IP68
Output Cables	4mm², +300/-1000mm(Vertical), +220/-180mm(Horizontal)
Connectors	MC4 original /MC4 compatible
Withstanding Hail	Maximum diameter of 25 mm with impact speed of 23 m/s
Packaging	36pcs/box, 864pcs/40'container

Operating Characteristics

Maximum Surface Load Capacity [Pa]	Front 5400/ Back 2400
Maximun System Voltage	DC 1500V/1000V (IEC)
Maximun Series Fuse Rating	20A
Power Tolerance	0~+5W

Temperature Characteristics

Operating Module Temperature	-40°C ~ +85°C
Temperature Coefficient of Voc	-0.24%°C
Temperature Coefficient of Isc	+0.04%°C
Temperature Coefficient of Pmax	-0.26%°C

Electrical Parameters (STC*)

Module Type:	470	475	480	485	490
Maximum Power (Pmax/W)	470	475	480	485	490
Module Efficiency (%)	22.6	22.8	23.1	23.3	23.5
Optimum Operating Voltage (Vmp/V)	36.90	37.00	37.10	37.20	37.30
Optimum Operating Current (Imp/A)	12.74	12.84	12.95	13.05	13.15
Open Circuit Voltage (Voc/V)	44.30	44.40	44.50	44.60	44.70
Short Circuit Current (Isc/A)	13.56	13.67	13.78	13.89	13.99

Electrical Characteristics (NMOT*)

Maximum Power (Pmax/W)	355	359	363	367	371
Optimum Operating Voltage (Vmp/V)	35.20	35.30	35.40	35.50	35.60
Optimum Operating Current (Imp/A)	10.09	10.17	10.26	10.34	10.43
Open Circuit Voltage (Voc/V)	42.30	42.40	42.50	42.60	42.70
Short Circuit Current (Isc/A)	10.95	11.04	11.13	11.22	11.31

1. Standard Test Conditions [STC]: irradiance 1000W/m2; AM 1.5; ambient temperature 25°C according to EN 60904-3;
2. Nominal Module Operating Temperature (NMOT): Irradiance 800W/m2; wind speed 1m/s , ambient temperature 20°C.
3. Tolerance of Pm: 0~+5W, Measuring uncertainty of power: ±3%. Performance deviation of Voc [V], Isc [A], Vm [V] and Im [A]: ±3%.

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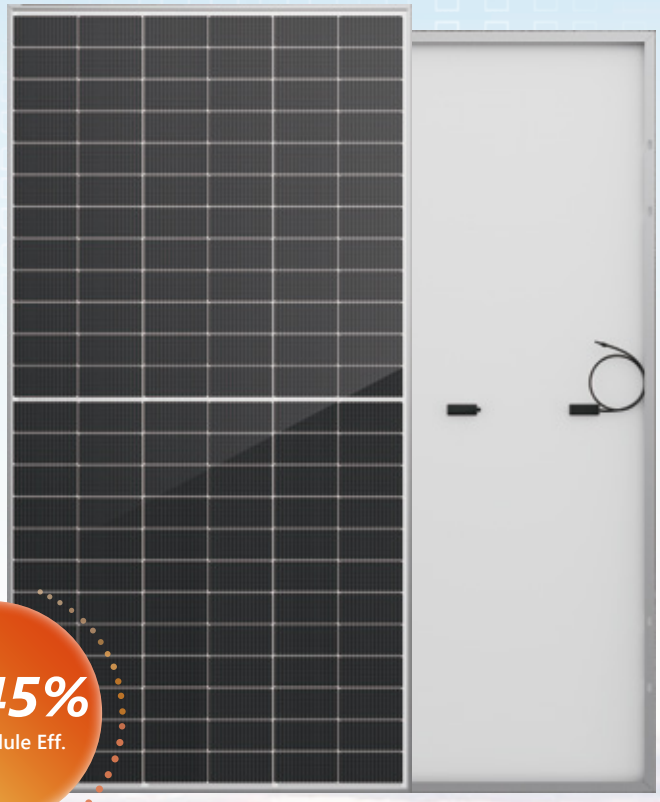
UNI T

UE580T-72H

570-590W

N-type TOPCon Monofacial Solar Module



22.45%
Max Module Eff.

N-type Technology

N-typemodules with Tunnel Oxide Passivating Contacts (TOPCon) technology offer lower LID/LeTID degradation and better low light performance.

HOT 2.0 Technology

N-type modules with UESolar's HOT 2.0technology offer better reliability andefficiency.

Durability Against Extreme Environment

High salt mist and ammonia resistance.

Mechanical Load Enhanced

Certified to withstand:
5400 Pa front side max static test load
2400 Pa rear side max static test load

SMBB Technology

Better light trapping and current collectionto improve module power output andreliability.

Anti-PID Guarantee

Minimizes the chance of degradation caused byPID phenomena through optimization of cellproduction technology and material control.

Quality Management System and Product Certification

IEC 61215, IEC 61730, UL 61730

ISO9001: 2015: ISO Quality Management System.

ISO14001: 2015:ISO Environmental Management System.

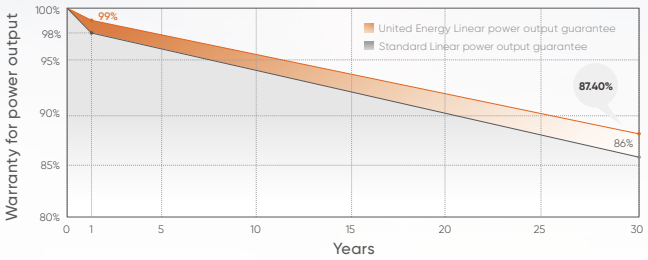
ISO45001: 2018: Occupation Health and Safety.

IEC62941:Guideline for module design qualification and type approval.

Quality Guarantee

12 year Materials Warranty

30 year Power Warranty



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United Energy Co., LTD

UNI T 570~590W

Electrical Parameters(STC*)

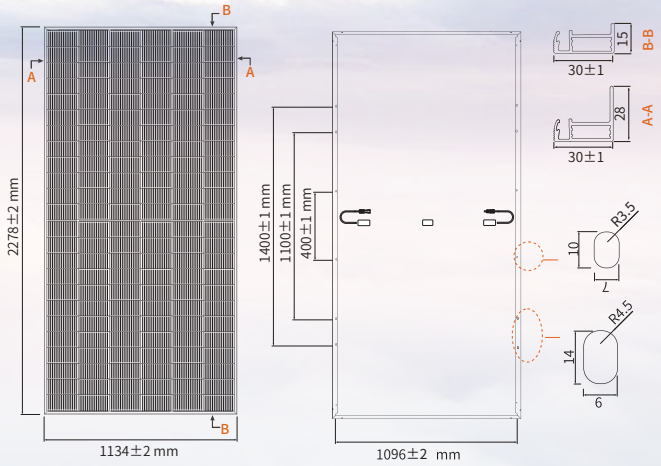
Module Type	570	575	580	585	590
Maximum power (Pmax/W)	570	575	580	585	590
Open Circuit Voltage (Voc/V)	51.99	51.15	51.31	52.31	52.63
Short Circuit Current (Isc/A)	13.89	13.95	14.01	14.01	14.13
Voltage at Maximum power (Vmpp/V)	42.99	43.17	43.35	43.53	43.71
Current at Maximum Power (Imp/A)	13.26	13.32	13.38	13.44	13.50
Module Efficiency(%)	22.07	22.26	22.45	22.65	22.84

Specifications(NOCT)

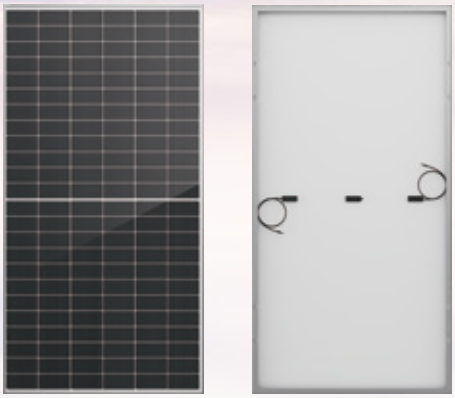
Maximum power (Pmax/W)	430	433	437	441	445
Maximum power Voltage (Vmp/V)	40.37	40.54	40.70	40.86	41.05
Maximum power Current (Imp/A)	10.64	10.69	10.74	10.79	10.83
Open Circuit Voltage (Voc/V)	49.38	49.54	49.69	49.84	49.99
Short Circuit Current (Isc/A)	11.21	11.26	11.31	11.36	11.41

1. Standard Test Conditions [STC]: irradiance 1000W/m²; AM 1.5; ambient temperature 25°C according to EN 60904-3;
2. Tolerance of Pm: 0~+5W, Measuring uncertainty of power: ±3%. Performance deviation of Voc [V], Isc [A], Vm [V] and Im [A]: ±3%.

Design(mm)



Product Image



Design(mm)

Solar Cells	N-type Mono
No. of Cells	144 (6×24)
Dimensions	2278 × 1134 × 30mm
Weight	27.0kg
Front Glass	3.2mm, Anti-Reflection Coating; High Transmission,Low Iron, Tempered Glass
Frame	Anodized aluminium alloy
Junction Box	Ip68 rated (3 Bypass Diodes)
Output Cables	4mm², 400mm (+) / 200mm (-), or customized Length
Connectors	Mc4 compatible
Mechanical load test	5400Pa
Packaging	36pcs/box, 720pcs/40'HQ

Operating Characteristics

Operating Module Temperature	-40°C ~ +85°C
Maximun System Voltage	1500V DC (IEC)
Maximun Series Fuse Rating	25A
Power Tolerance	0/+5W

Temperature Characteristics

Nominal Operating Temperature (NMOT)	45±2°C
Temperature Coefficient of Pmax	-0.29%°C
Temperature Coefficient of Voc	-0.25%°C
Temperature Coefficient of Isc	+0.045%°C

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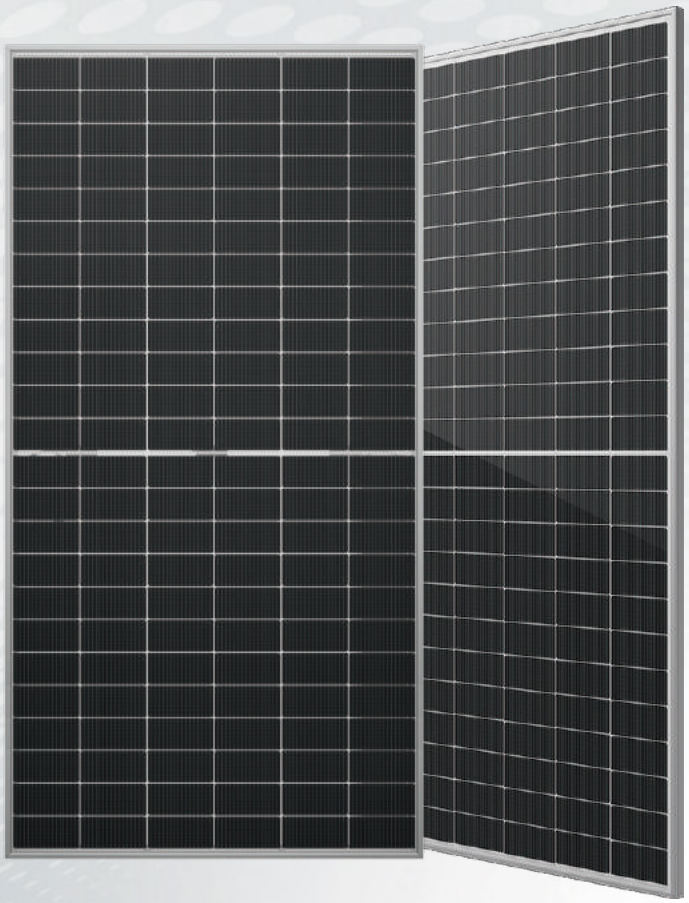
HETERO JUNCTION TECHNOLOGY



UNI H

UE600H-72HBD

N-type HJT Bifacial Dual Glass Solar Module

HJT 2.0 Technology

Combining gettering process and single-side μc-Si technology to ensure higher cell efficiency and higher module power.

-0.26%/°C Pmax temperature coefficient

More stable power generation performance and even better in hot climate.

SMBB design with Half-Cut Technology

Shorter current transmission distance, less resistive loss and higher cell efficiency.

Up to 90% Bifaciality

Natrual symmetrical bifacial structure bringing more energy yield from the backside.

Sealing with PIB based sealant

Stronger water resistance, greater air impermeability to extent module lifespan.

580-600W

Max Efficiency 23.22%

Quality Management System and Product Certification

IEC 61215, IEC 61730, UL 61730

ISO9001: 2015: ISO Quality Management System.

ISO14001: 2015:ISO Environmental Management System.

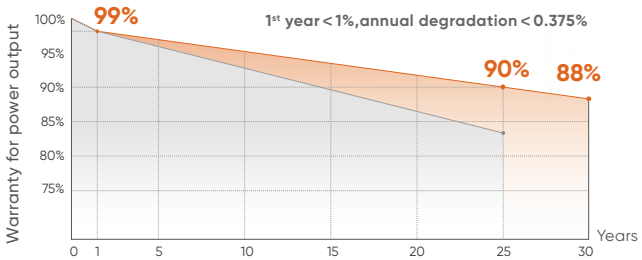
ISO45001: 2018: Occupation Health and Safety.

IEC62941:Guideline for module design qualification and type approval.

Quality Guarantee

15 Year Materials Warranty

30 Year Power Warranty



Less than 1% attenuation in the 1st year, the annual attenuation from the 2nd year is no more than 0.375%, and the power is no less than 88% until the 30th year.

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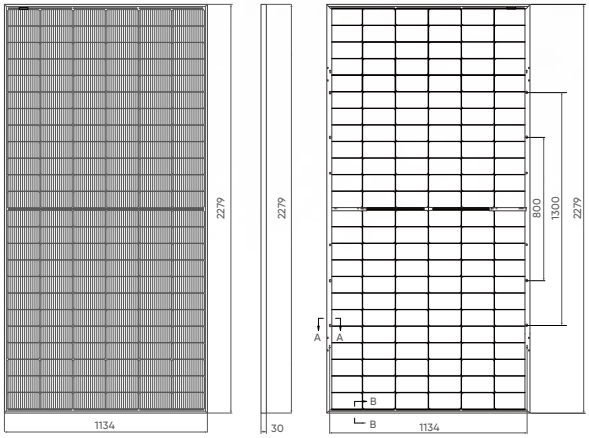
UNI H 580-600W

Drawings

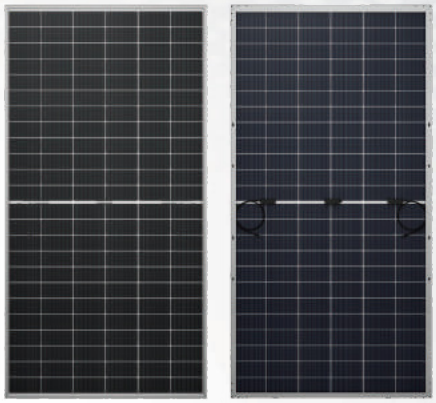


Section A-A

Section B-B

(Unit: mm)

Product Image



Mechanical Characteristics

Solar Cells	N-type HJT
No. of Cells	144 (6×24)
Dimensions	2279 × 1134 × 30mm
Weight	31.5kg
Glass	Front: 2.0mm coated semi-tempered glass; Back: 2.0mm semi-tempered glass
Frame	Anodized aluminium alloy
Junction Box	Ip68 rated (3 by pass diodes)
Output Cables	4mm², 300mm (+) / 300mm (-), Length can be customized
Connectors	Mc4 compatible
Mechanical load test	5400Pa
Packaging	36pcs/box, 720pcs/40'HQ

Operating Characteristics

Operating Module Temperature	-40°C to +85°C
Maximun System Voltage	DC1500V(IEC)
Maximun Series Fuse Rating	30A
Power Tolerance	0/+5W

Temperature Characteristics

Nominal Operating Temperature (NMOT)	44±2°C
Temperature Coefficient of Pmax	-0.26%°C
Temperature Coefficient of Voc	-0.24%°C
Temperature Coefficient of Isc	+0.04%°C

Electrical Parameters (STC*)

Module Type:	580	585	590	595	600
Maximum Power (Pmax/W)	580	585	590	595	600
Open Circuit Voltage (Voc/V)	53.92	54.12	54.31	54.50	54.70
Short Circuit Current (Isc/A)	13.35	13.40	13.45	13.50	13.55
Voltage at Maximum power (Vmp/V)	45.00	45.21	45.42	45.63	45.84
Current Maximum Power (Imp/A)	12.89	12.94	12.99	13.04	13.09
Module Efficiency (%)	22.44	22.64	22.83	23.02	23.22

Bifacial Output-Rearside Power Gain

5%	Maximum Power (Pmax/W)	641	646	652	657	663
	Module Efficiency STC (%)	23.57	23.78	23.98	24.18	24.39
15%	Maximum Power (Pmax/W)	667	673	679	684	690
	Module Efficiency STC (%)	25.82	26.05	26.27	26.48	26.71
25%	Maximum Power (Pmax/W)	725	731	738	744	750
	Module Efficiency STC (%)	28.06	28.31	28.55	28.79	29.04

1. Standard Test Conditions [STC]: irradiance 1000W/m²; AM 1.5; ambient temperature 25°C according to EN 60904-3;
2. Tolerance of Pm: 0~+5W, Measuring uncertainty of power: ±3%. Performance deviation of Voc [V], Isc [A], Vm [V] and Im [A]: ±3%.

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UNI T

UE700T-72HBD

675-700W

N-type TOPCon Bifacial Dual Glass Solar Module

22.5%
Max Module Eff.

High customer value

- Lower LCOE (levelized cost of energy),reduced BOS(balance of system)cost,shorter payback time
- Guaranteed first year and annual degradation
- High module power;high string power and low voltage design

High power up to 700W

- Up to 22.5% module efficiency with high density interconnect technology
- Multi-busbar technology for better light trapping effect,lower series resistance and improved current collection

High reliability

- Minimized micro-cracks with innovative non-destructive cutting technology
- Ensured PID resistance through cell process and module material control
- Resistant to harsh environments such as salt,ammonia, sand,high temperature and high humidity areas
- Mechanical performance up to 5400 Pa positive load and 2400 Panegative load

High energy yield

- Excellent product bifadality and low irradiation performance,validated by 3rd party
- Extremely low 1% first year degradation and 0.4% annual power attenuation
- The unique design provides optimized energy production under inter-row shading conditions
- Lower temperature coefficient(-0.30%) and operating temperature
- Up to 30% additional power gain from back side depending on albedo

Quality Management System and Product Certification

IEC 61215, IEC 61730, UL 61730

ISO9001: 2015: ISO Quality Management System.

ISO14001: 2015:ISO Environmental Management System.

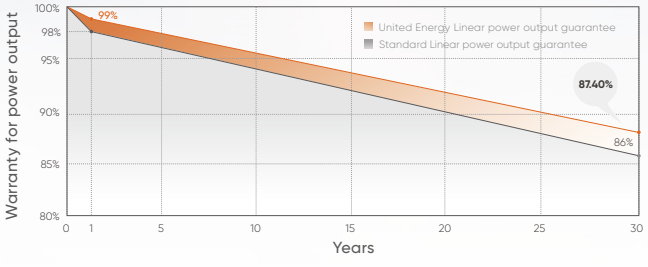
ISO45001: 2018: Occupation Health and Safety.

IEC62941:Guideline for module design qualification and type approval.

Quality Guarantee

12 year Materials Warranty

30 year Power Warranty



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UNI T 675~700W

Electrical Parameters(STC*)

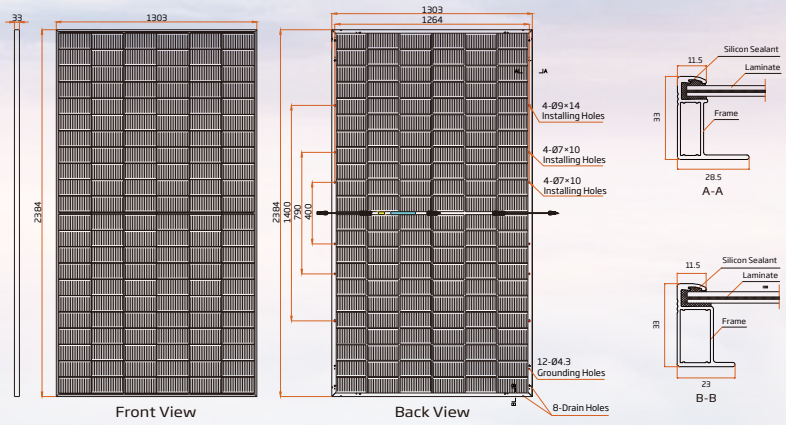
Module Type	675	680	685	690	695	700
Maximum power (Pmax/W)	675	680	685	690	695	700
Open Circuit Voltage (Voc/V)	47.2	47.4	47.7	47.9	48.3	48.6
Short Circuit Current (Isc/A)	18.14	18.18	18.21	18.25	18.28	18.32
Voltage at Maximum power (Vmpp/V)	39.4	39.6	39.8	40.1	40.3	40.5
Current at Maximum Power (Imp/A)	17.12	17.16	17.19	17.23	17.25	17.29
Module Efficiency(%)	21.7	21.9	22.1	22.2	22.4	22.5

Electrical characteristics with different power bin (reference to 10% Irradiance ratio)

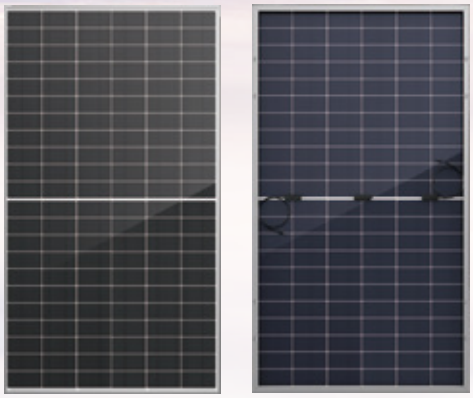
Total Equivalent power (Pmax/W)	729	734	740	745	751	756
Maximum power Voltage (Vmp/V)	39.4	39.6	39.8	40.1	40.3	40.5
Maximum power Current (Imp/A)	18.49	18.53	18.57	18.61	18.63	18.67
Open Circuit Voltage (Voc/V)	47.2	47.4	47.7	47.9	48.3	48.6
Short Circuit Current (Isc/A)	19.59	19.63	19.67	19.71	19.74	19.79

1. Standard Test Conditions [STC]: irradiance 1000W/m²; AM 1.5; ambient temperature 25°C according to EN 60904-3;
2. Tolerance of Pm: 0~+5W, Measuring uncertainty of power: ±3%. Performance deviation of Voc [V], Isc [A], Vm [V] and Im [A]: ±3%.

Design(mm)



Product Image



Design(mm)

Solar Cells	N-type
No. of Cells	132 (6×22)
Dimensions	2384 × 1303 × 33mm
Weight	38.3kg
Front Glass	Front: 2.0mm, High Transmission, AR Coated Heat Strengthened Glass Back: 2.0mm, Heat Strengthened Glass
Frame	Anodized aluminium alloy
Junction Box	Ip68 rated (3 Bypass Diodes)
Output Cables	4mm², 350/280mm, Length can be customized
Connectors	Mc4 compatible
Mechanical load test	5400Pa
Packaging	33pcs/box, 594pcs/40'HQ

Operating Characteristics

Operating Module Temperature	-40°C ~ +85°C
Maximun System Voltage	1500V DC (IEC)
Maximun Series Fuse Rating	35A
Power Tolerance	0/+5W

Temperature Characteristics

Nominal Operating Temperature (NMOT)	45±2°C
Temperature Coefficient of Pmax	-0.30%°C
Temperature Coefficient of Voc	-0.24%°C
Temperature Coefficient of Isc	+0.04%°C

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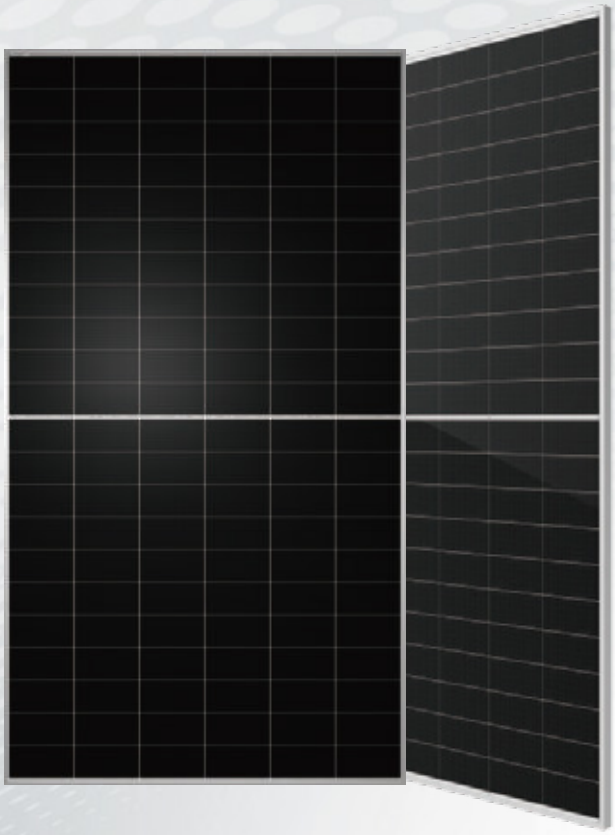


UNI H

UE740H-66HBD

N-type HJT Bifacial Dual Glass Solar Module

HJT 2.0 Technology

Combining gettering process and single-side μc-Si technology to ensure higher cell efficiency and higher module power.

-0.26%/°C Pmax temperature coefficient

More stable power generation performance and even better in hot climate.

SMBB design with Half-Cut Technology

Shorter current transmission distance, less resistive loss and higher cell efficiency.

Up to 90% Bifaciality

Natrual symmetrical bifacial structure bringing more energy yield from the backside.

Sealing with PIB based sealant

Stronger water resistance, greater air impermeability to extent module lifespan.

715-740W

Max Efficiency 23.80%

Quality Management System and Product Certification

IEC 61215, IEC 61730, UL 61730

ISO9001: 2015: ISO Quality Management System.

ISO14001: 2015:ISO Environmental Management System.

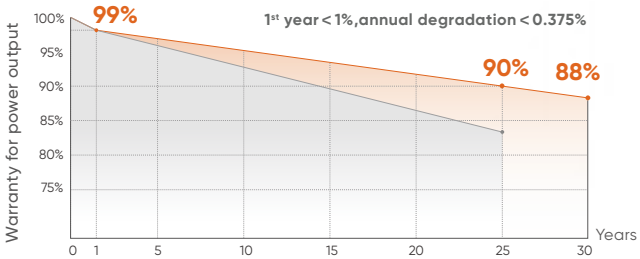
ISO45001: 2018: Occupation Health and Safety.

IEC62941:Guideline for module design qualification and type approval.

Quality Guarantee

15 Year Materials Warranty

30 Year Power Warranty



Less than 1% attenuation in the 1st year, the annual attenuation from the 2nd year is no more than 0.375%, and the power is no less than 88% until the 30th year.

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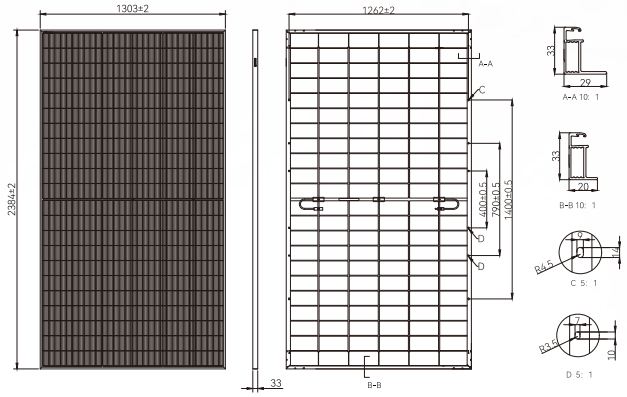
UNI H 715-740W

Drawings



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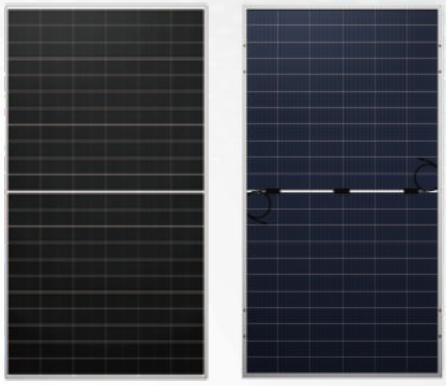

Mechanical Characteristics

Solar Cells	N-type HJT
No. of Cells	132 (6×22)
Dimensions	2384 × 1303 × 33mm
Weight	37.5kg
Glass	Front: 2.0mm AR coated heat strengthned glass; Back: 2.0mm heat strengthned glass
Frame	Anodized aluminium alloy frame
Junction Box	Ip68 rated (3 by pass diodes)
Output Cables	4mm2, 400mm (+) / 200mm (-) or ±1400mm, Length can be customized
Connectors	Mc4 compatible
Mechanical load test	2400Pa/5400Pa
Packaging	33pcs/box, 594pcs/40'HQ

Operating Characteristics

Operating Module Temperature	-40°C to +85°C
Maximun System Voltage	DC1500V(IEC)
Maximun Series Fuse Rating	35A
Power Tolerance	0/+3W

Temperature Characteristics

Nominal Operating Temperature (NMOT)	44±2°C
Temperature Coefficient of Pmax	-0.24%°C
Temperature Coefficient of Voc	-0.22%°C
Temperature Coefficient of Isc	+0.04%°C

Electrical Characteristics (STC*/NMOT*)

Front Side	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power (Pmax/W)	715	545	720	548	725	552	730	556	735	560	740	564
Open Circuit Voltage (Voc/V)	50.22	48.01	50.30	48.09	50.38	48.16	50.46	48.24	50.54	48.32	50.62	48.39
Short Circuit Current (Isc/A)	17.98	14.50	18.08	14.58	18.18	14.66	18.28	14.74	18.37	14.81	18.47	14.89
Voltage at Maximum power (Vmp/V)	41.84	39.56	41.94	39.57	42.03	39.69	42.13	39.80	42.22	39.89	42.32	40.00
Current Maximum Power (Imp/A)	17.09	13.78	17.17	13.85	17.25	13.91	17.33	13.97	17.41	14.04	17.49	14.10
Module Efficiency (%)	23.00		23.20		23.30		23.50		23.70		23.80	

Bifacial Output-Rearside Power Gain

5%	Maximum Power (Pmax/W)	751	756	761	767	772	777
	Module Efficiency STC (%)	24.20	24.30	24.50	24.70	24.80	25.00
15%	Maximum Power (Pmax/W)	822	828	834	840	845	851
	Module Efficiency STC (%)	26.50	26.70	26.80	27.00	27.20	27.40
25%	Maximum Power (Pmax/W)	894	900	906	913	919	925
	Module Efficiency STC (%)	28.80	29.00	29.20	29.40	29.60	29.80

1. Standard Test Conditions [STC]: irradiance 1000W/m²; AM 1.5; ambient temperature 25°C according to EN 60904-3;
2. Tolerance of Pm: 0~+5W, Measuring uncertainty of power: ±3%. Performance deviation of Voc [V], Isc [A], Vm [V] and Im [A]: ±3%.

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Focuses on providing customers with efficient, safe, and smart energy solutions to meet the growing energy demand while contributing to environmental protection.

More than 15 years of experience since 2009, UE has finalized more than 8,000 projects in more than 150 countries and regions around the world, including household, commercial, and large power stations.

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