

HDxxxM10NHB-144  
0~+5W  
**570~590W**

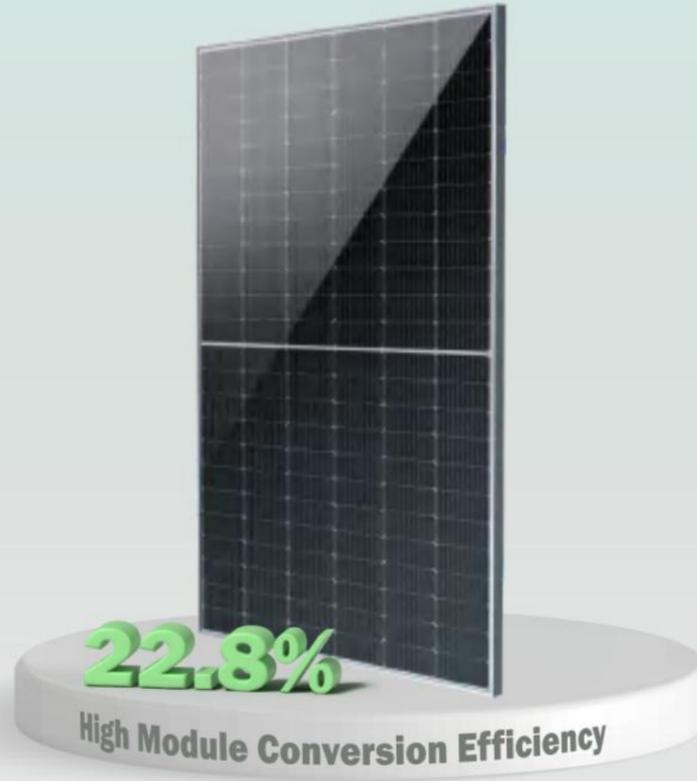
TOPCon Mono-crystalline Bifacial Module



Materials and workmanship warranty



Linear performance warranty



KEY FEATURES



Outstanding performance in weak-light conditions



Lower operating temperature



Half-cell and MBB design



Extended wind and snow load tests

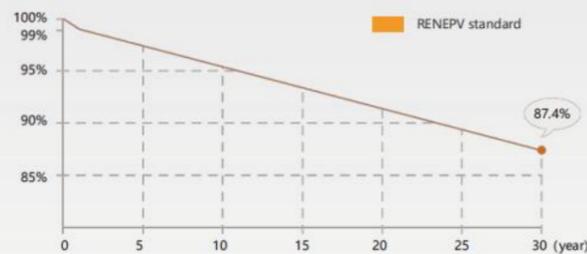


Withstanding harsh environment



Use scenario customization

QUALITY CERTIFICATION



First year power degradation <1%  
Annual degradation <0.4%

PRODUCT GUARANTEE

ISO 9001:2015 Quality management systems  
ISO 14001:2015 Environment management systems  
ISO 45001:2018 Occupational health and safety management systems  
IEC 61215 / IEC 61730 / IEC 61701 / IEC 62716  
TUV / CE / CQC / MCS / BIS / SASO / SGS / INMETRO



ELECTRICAL CHARACTERISTICS

Module Type	HD570M10NHB-144		HD575M10NHB-144		HD580M10NHB-144		HD585M10NHB-144		HD590M10NHB-144		
Working Conditions	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	
Maximum Power at STC/NMOT (Pmax)	W	570	426.4	575	430.1	580	433.8	585	437.58	590	441.32
Optimum Operating Voltage (Vmp)	V	43.34	40.31	43.50	40.46	43.68	40.62	43.83	40.85	44.01	40.93
Optimum Operating Current (Imp)	A	13.15	10.58	13.22	10.63	13.28	10.68	13.34	10.71	13.41	10.78
Open Circuit Voltage(Voc)+3%	V	51.48	47.88	51.66	48.04	51.84	48.21	51.44	47.84	51.61	48.00
Short Circuit Current(Isc)+3%	A	13.68	11.27	13.76	11.33	13.83	11.39	14.07	11.58	14.13	11.64
Module Efficiency	%	22.1		22.3		22.5		22.6		22.8	
Maximum System Voltage	V	1500(DC)									
Maximum Series Fuse Rating	A	30									
Operating Module Temperature	°C	-40~+85									

STC: Irradiance 1000W/m<sup>2</sup> cell temperature 25°C, atmospheric quality AM1.5  
NMOT: Irradiance 800W/m<sup>2</sup>, ambient temperature 20°C, AM1.5, wind speed 1m/s

MECHANICAL CHARACTERISTICS

Solar Cell (No. of cells)	N-Mono 182x182 72 PCS
Dimensions	2278x1134x30 mm
Weight	30.2 kg (±3%)
Glass	2.0+2.0mm Low-iron tempered glass
Frame	Anodized aluminum alloy
Junction Box	IP68 rated 3 bypass-diodes
Output Cables	4mm <sup>2</sup> /2x300mm or Customized length
Mechanical Load	
Safety Rate	Class II (IEC)

TEMPERATURE CHARACTERISTICS

Temperature Coefficient of Pmax	%/°C	-0.30
Temperature Coefficient of Voc	%/°C	-0.25
Temperature Coefficient of Isc	%/°C	+0.05
Nominal Module Operating Temperature	°C	45±2

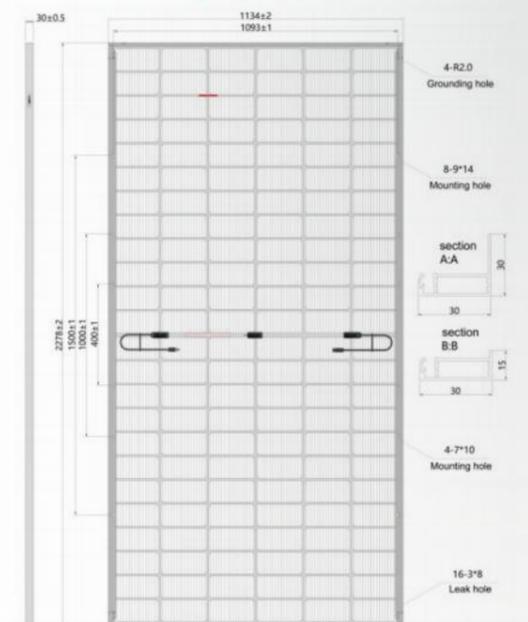
DIFFERENT BACKSIDE POWER GAIN (585W)

Power Gain	5%	15%	25%	
Maximum Power Pmp	W	672.8	731.3	
Optimum Operating Voltage (Voc)	V	43.83	43.83	43.83
Optimum Operating Current (Imp)	A	14.01	15.35	16.68
Open Circuit Voltage (Voc)	V	51.44	51.44	51.44
Short Circuit Current (Isc)	A	15.12	16.55	17.99

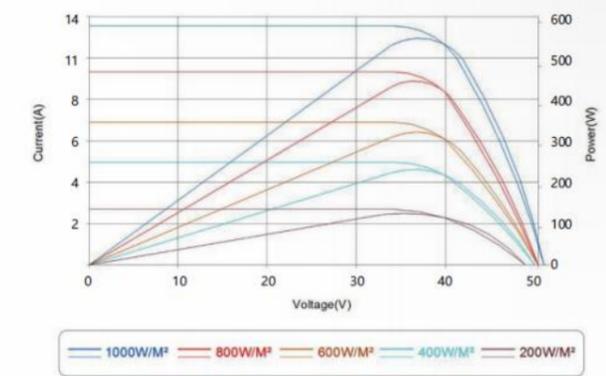
PACKING CONFIGURATION

Container 40'HQ	37 PCS/Pallet	20 Pallets/40'HQ	740 PCS/40'HQ
17.5m Land Truck	37 PCS/Pallet	28 Pallets/Truck	1036 PCS/Truck

ASSEMBLY DRAWING (MM)



I-V CURVES (580W)



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HDxxxG12RNHB-132

0~+5W

610~630W

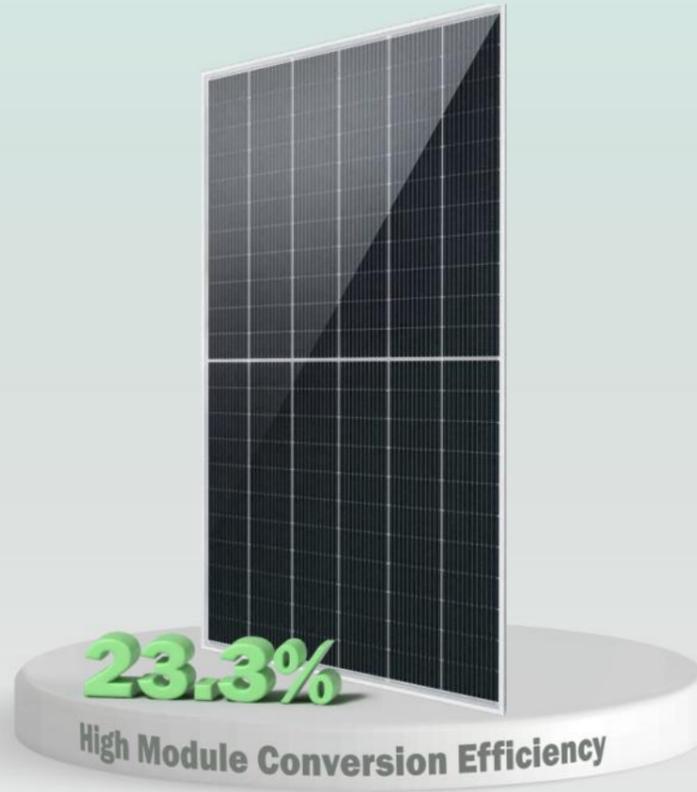
TOPCon Mono-crystalline Bifacial Module



Materials and workmanship warranty



Linear performance warranty



KEY FEATURES



Outstanding performance in weak-light conditions



Lower operating temperature



Half-cell and MBB design



Extended wind and snow load tests

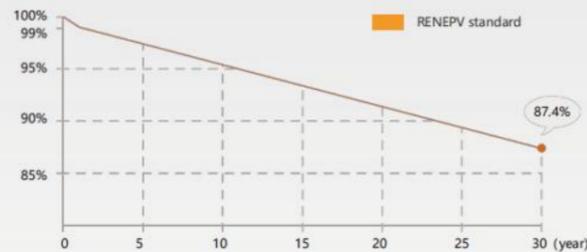


Withstanding harsh environment



Use scenario customization

QUALITY CERTIFICATION



First year power degradation <1%  
Annual degradation <0.4%

PRODUCT GUARANTEE

ISO 9001:2015 Quality management systems  
ISO 14001:2015 Environment management systems  
ISO 45001:2018 Occupational health and safety management systems  
IEC 61215 / IEC 61730 / IEC 61701 / IEC 62716  
TUV / CE / CQC / MCS / BIS / SASO / SGS / INMETRO



ELECTRICAL CHARACTERISTICS

Module Type	HD610G12RNHB-132		HD615G12RNHB-132		HD620G12RNHB-132		HD625G12RNHB-132		HD630G12RNHB-132		
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	
Working Conditions											
Maximum Power at STC/NMOT (Pmax)	W	610	458.7	615	462.5	620	466.2	625	470	630	473.8
Optimum Operating Voltage (Vmp)	V	40.00	37.20	40.19	37.38	40.39	37.56	40.46	37.63	40.52	37.68
Optimum Operating Current (Imp)	A	15.25	12.33	15.30	12.37	15.35	12.41	15.45	12.49	15.55	12.57
Open Circuit Voltage (Voc)+3%	V	47.59	44.26	47.78	44.44	47.98	44.62	48.05	44.69	48.11	44.74
Short Circuit Current (Isc)+3%	A	16.20	13.10	16.25	13.14	16.30	13.18	16.38	13.25	16.47	13.32
Module Efficiency	%	22.6		22.7		22.9		23.1		23.3	
Maximum System Voltage	V	1500(DC)									
Maximum Series Fuse Rating	A	30									
Operating Module Temperature	°C	-40~+85									

STC: Irradiance 1000W/m<sup>2</sup> cell temperature 25°C, atmospheric quality AM1.5  
NMOT: Irradiance 800W/m<sup>2</sup>, ambient temperature 20°C, AM1.5, wind speed 1m/s

MECHANICAL CHARACTERISTICS

Solar Cell (No. of cells)	N-Mono 18x210 66PCS
Dimensions	2382x1134x30 mm
Weight	32.0 kg (±3%)
Glass	2.0+2.0mm Low-iron tempered glass
Frame	Anodized aluminum alloy
Junction Box	IP68 rated 3 bypass-diodes
Output Cables	4mm <sup>2</sup> /2x300mm or Customized length
Mechanical Load	
Safety Rate	Class II (IEC)

TEMPERATURE CHARACTERISTICS

Temperature Coefficient of Pmax	%/°C	-0.30
Temperature Coefficient of Voc	%/°C	-0.25
Temperature Coefficient of Isc	%/°C	+0.05
Nominal Module Operating Temperature	°C	45±2

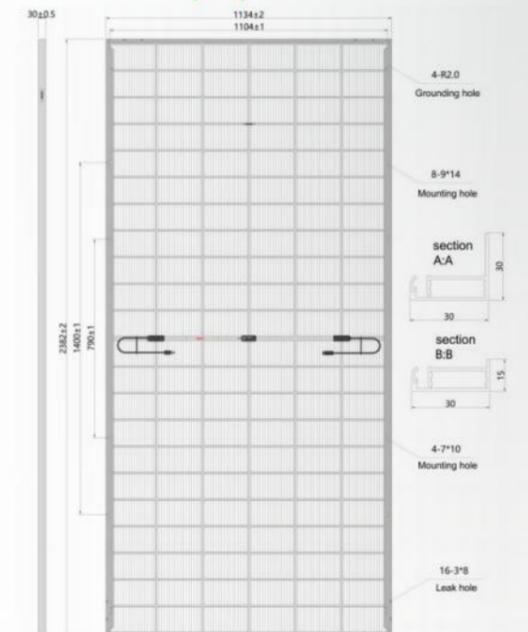
DIFFERENT BACKSIDE POWER GAIN (630W)

Power Gain		5%	15%	25%
Maximum Power Pmp	W	661.5	724.5	787.5
Optimum Operating Voltage (Voc)	V	40.52	40.52	40.52
Optimum Operating Current (Imp)	A	16.33	17.88	19.43
Open Circuit Voltage (Voc)	V	48.11	48.11	48.11
Short Circuit Current (Isc)	A	17.40	19.06	20.72

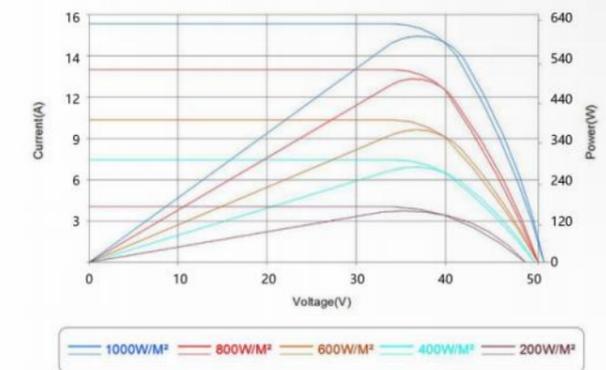
PACKING CONFIGURATION

Container 40'HQ	37 PCS/Pallet	20 Pallets/40'HQ	740 PCS/40'HQ
17.5m Land Truck	37 PCS/Pallet	26 Pallets/Truck	962 PCS/Truck

ASSEMBLY DRAWING (MM)



I-V CURVES (630W)



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HDxxxG12NHB-132  
0~+5W  
**700~720W**

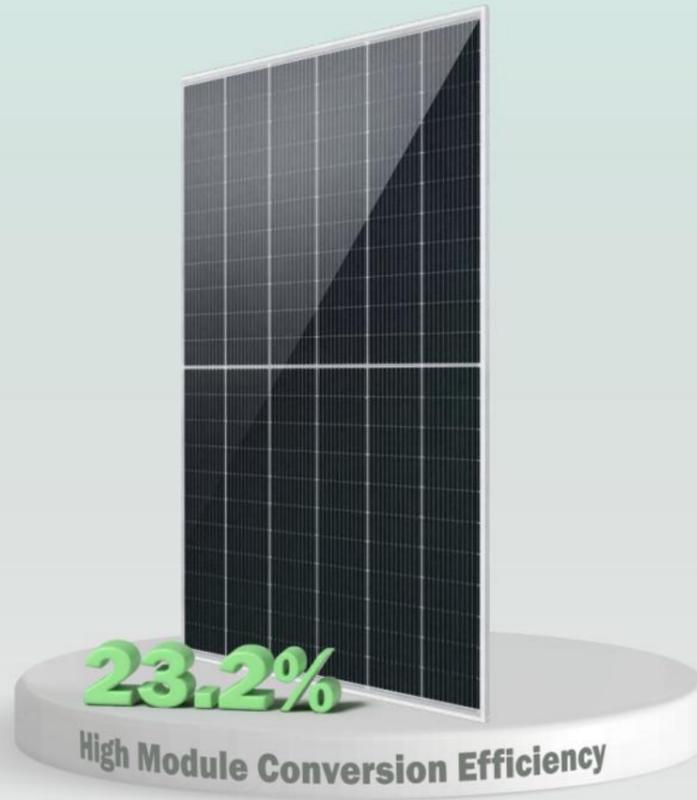
TOPCon Mono-crystalline Bifacial Module



Materials and workmanship warranty



Linear performance warranty



**KEY FEATURES**



Outstanding performance in weak-light conditions



Lower operating temperature



Half-cell and MBB design



Extended wind and snow load tests

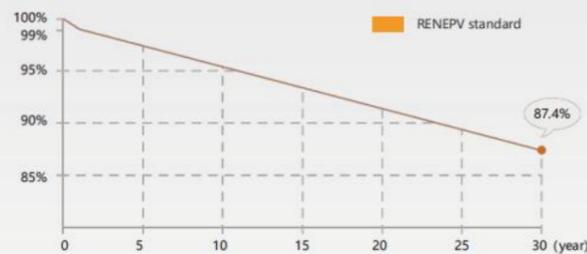


Withstanding harsh environment



Use scenario customization

**QUALITY CERTIFICATION**



First year power degradation <1%  
Annual degradation <0.4%

**PRODUCT GUARANTEE**

ISO 9001:2015 Quality management systems  
ISO 14001:2015 Environment management systems  
ISO 45001:2018 Occupational health and safety management systems  
IEC 61215 / IEC 61730 / IEC 61701 / IEC 62716  
TUV / CE / CQC / MCS / BIS / SASO / SGS / INMETRO



**ELECTRICAL CHARACTERISTICS**

Module Type	HD700G12NHB-132		HD705G12NHB-132		HD710G12NHB-132		HD715G12NHB-132		HD720G12NHB-132		
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	
Working Conditions											
Maximum Power at STC/NMOT (Pmax)	W	700	523.6	705	527.3	710	531.1	715	534.8	720	534.8
Optimum Operating Voltage (Vmp)	V	40.61	37.77	40.76	37.91	40.91	38.05	41.06	38.19	41.25	38.36
Optimum Operating Current (Imp)	A	17.24	13.86	17.30	13.91	17.36	13.96	17.41	14.01	17.46	14.04
Open Circuit Voltage(Voc)+3%	V	48.53	45.13	48.68	45.27	48.83	45.41	48.98	45.55	49.17	45.73
Short Circuit Current(Isc)+3%	A	18.09	14.69	18.13	14.74	18.21	14.80	18.27	14.86	18.30	14.91
Module Efficiency	%	22.5		22.7		22.9		23.0		23.2	
Maximum System Voltage	V	1500(DC)									
Maximum Series Fuse Rating	A	35									
Operating Module Temperature	°C	-40~+85									

STC: Irradiance 1000W/m<sup>2</sup> cell temperature 25°C, atmospheric quality AM1.5  
NMOT: Irradiance 800W/m<sup>2</sup>, ambient temperature 20°C, AM1.5, wind speed 1m/s

**MECHANICAL CHARACTERISTICS**

Solar Cell (No. of cells)	N-Mono 210x210 66 PCS
Dimensions	2384 × 1303 × 33 mm
Weight	36.0 kg (±3%)
Glass	2.0+2.0mm Low-iron tempered glass
Frame	Anodized aluminum alloy
Junction Box	IP 68 rated 3 bypass-diodes
Output Cables	4mm <sup>2</sup> /2×300mm or Customized length
Mechanical Load	
Safety Rate	Class II (IEC)

**TEMPERATURE CHARACTERISTICS**

Temperature Coefficient of Pmax	%/°C	-0.30
Temperature Coefficient of Voc	%/°C	-0.25
Temperature Coefficient of Isc	%/°C	+0.05
Nominal Module Operating Temperature	°C	45±2

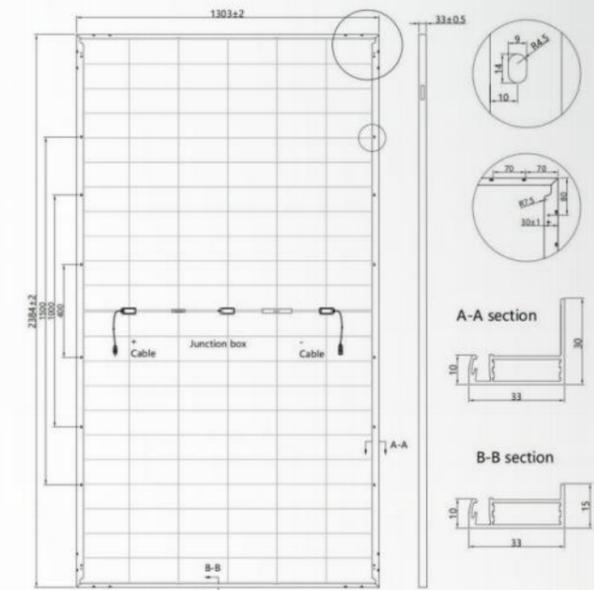
**DIFFERENT BACKSIDE POWER GAIN (590W)**

Power Gain		5%	15%	25%
Maximum Power Pmp	W	735.0	805.0	875.0
Optimum Operating Voltage (Voc)	V	40.61	40.61	40.61
Optimum Operating Current (Imp)	A	18.10	19.82	21.55
Open Circuit Voltage (Voc)	V	48.53	48.53	48.53
Short Circuit Current (Isc)	A	19.17	21.00	22.82

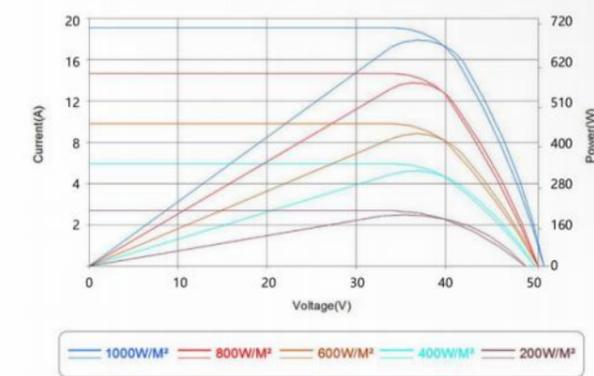
**PACKING CONFIGURATION**

Container 40'HQ	33 PCS/Pallet	18 Pallets/40'HQ	594 PCS/40'HQ
17.5m Land Truck	33 PCS/Pallet	24 Pallets/Truck	792 PCS/Truck

**ASSEMBLY DRAWING (MM)**



**I-V CURVES (590W)**



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HDxxxG12HNHB-132  
0~+5W  
**700~720W**

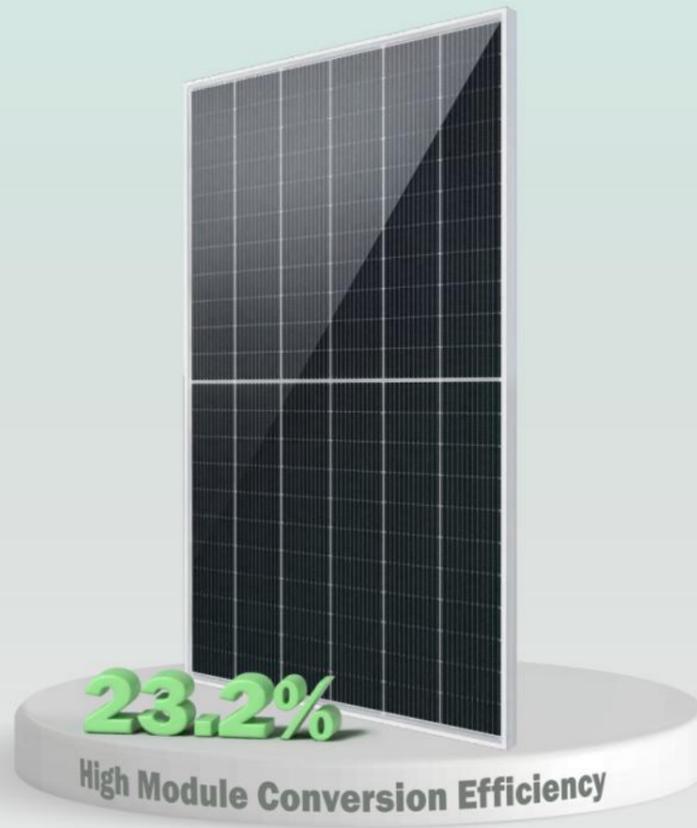
TOPCon Mono-crystalline Bifacial Module



Materials and workmanship warranty



Linear performance warranty



**KEY FEATURES**



Outstanding performance in weak-light conditions



Lower operating temperature



Half-cell and MBB design



Extended wind and snow load tests

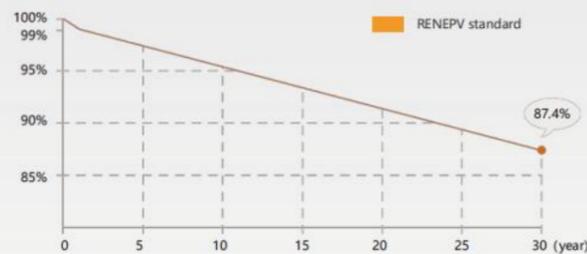


Withstanding harsh environment



Use scenario customization

**QUALITY CERTIFICATION**



First year power degradation <1%  
Annual degradation <0.4%

**PRODUCT GUARANTEE**

ISO 9001:2015 Quality management systems  
ISO 14001:2015 Environment management systems  
ISO 45001:2018 Occupational health and safety management systems  
IEC 61215 / IEC 61730 / IEC 61701 / IEC 62716  
TUV / CE / CQC / MCS / BIS / SASO / SGS / INMETRO



**ELECTRICAL CHARACTERISTICS**

Module Type	HD700G12HNHB-132		HD705G12HNHB-132		HD710G12HNHB-132		HD715G12HNHB-132		HD720G12HNHB-132		
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	
Working Conditions	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	
Maximum Power at STC/NMOT(P <sub>max</sub> )	W	700	534.3	705	538.1	710	549.9	715	545.8	720	549.6
Optimum Operating Voltage(V <sub>mp</sub> )	V	41.78	39.90	41.87	39.99	41.96	40.07	42.05	40.16	42.14	40.24
Optimum Operating Current (I <sub>mp</sub> )	A	16.76	13.40	16.84	13.46	16.93	13.52	17.02	13.59	17.10	13.66
Open Circuit Voltage(V <sub>oc</sub> )+3%	V	49.77	47.50	49.87	47.60	49.97	47.69	50.07	47.79	50.17	47.88
Short Circuit Current(I <sub>sc</sub> )+3%	A	17.81	14.23	17.90	14.30	17.99	14.38	18.08	14.45	18.17	14.52
Module Efficiency	%	22.5		22.7		22.9		23.0		23.2	
Maximum System Voltage	V	1500(DC)									
Maximum Series Fuse Rating	A	35									
Operating Module Temperature	°C	-40~+85									

STC: Irradiance 1000W/m<sup>2</sup> cell temperature 25°C, atmospheric quality AM1.5  
NMOT: Irradiance 800W/m<sup>2</sup>, ambient temperature 20°C, AM1.5, wind speed 1m/s

**MECHANICAL CHARACTERISTICS**

Solar Cell (No. of cells)	N-Mono 210x105 132 PCS
Dimensions	2384 × 1303 × 33 mm
Weight	36.2 kg (±3%)
Glass	2.0+2.0mm Low-iron tempered glass
Frame	Anodized aluminum alloy
Junction Box	IP68 rated 3 bypass-diodes
Output Cables	4mm <sup>2</sup> /2×300mm or Customized length
Mechanical Load	
Safety Rate	Class II (IEC)

**TEMPERATURE CHARACTERISTICS**

Temperature Coefficient of P <sub>max</sub>	%/°C	-0.25
Temperature Coefficient of V <sub>oc</sub>	%/°C	-0.22
Temperature Coefficient of I <sub>sc</sub>	%/°C	+0.04
Nominal Module Operating Temperature	°C	44 ± 2

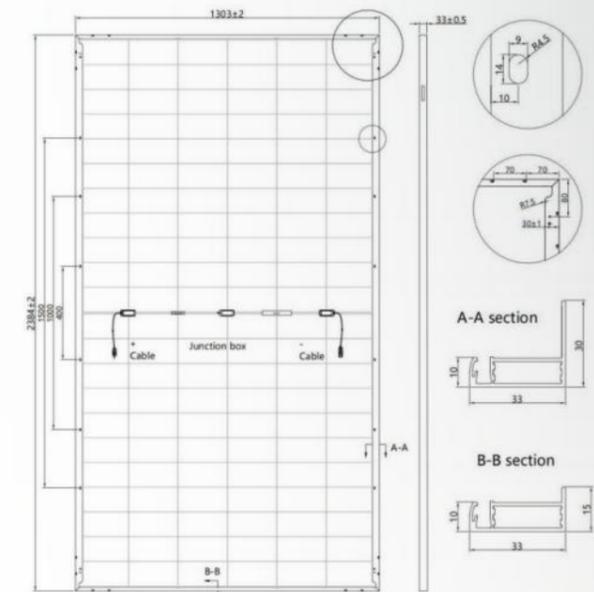
**DIFFERENT BACKSIDE POWER GAIN (700W)**

Power Gain	5%	15%	25%	
Maximum Power P <sub>mp</sub>	W	735.0	805.0	875.0
Optimum Operating Voltage (V <sub>oc</sub> )	V	41.78	41.78	41.78
Optimum Operating Current (I <sub>mp</sub> )	A	17.59	19.27	20.94
Open Circuit Voltage (V <sub>oc</sub> )	V	49.77	49.77	49.77
Short Circuit Current (I <sub>sc</sub> )	A	18.69	20.47	22.25

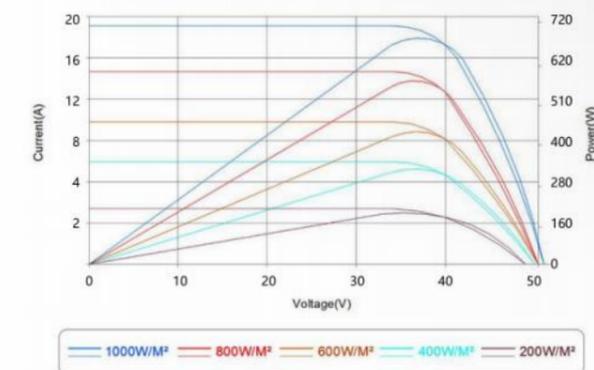
**PACKING CONFIGURATION**

Container 40'HQ	33 PCS/Pallet	18 Pallets/40'HQ	594 PCS/40'HQ
17.5m Land Truck	33PCS/Pallet	24 Pallets/Truck	792 PCS/Truck

**ASSEMBLY DRAWING (MM)**



**I-V CURVES (700W)**



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HDxxxM10PH-108(FR)  
0~+5W  
**360~380W**

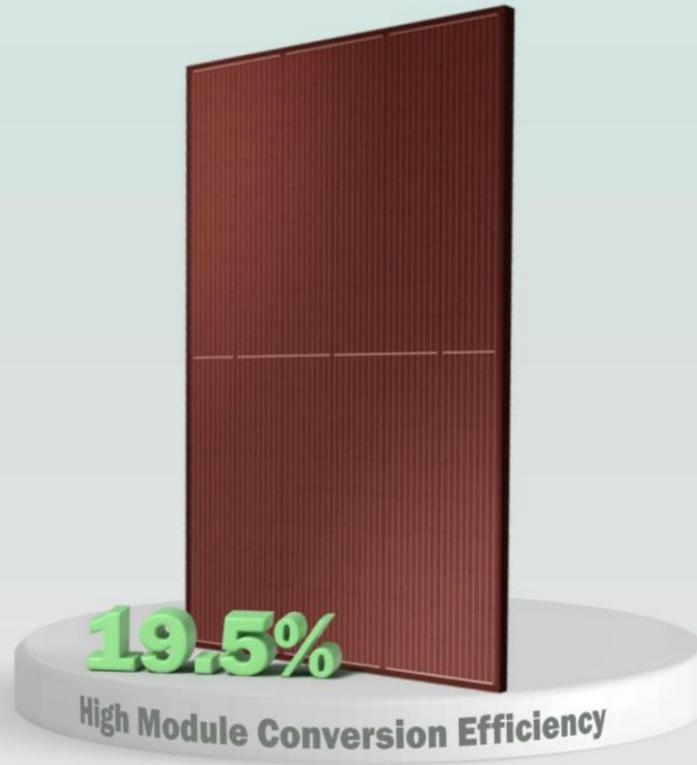
TOPCon Mono-crystalline Bifacial Module



Materials and workmanship warranty



Linear performance warranty



KEY FEATURES



Outstanding performance in weak-light conditions



Lower operating temperature



Half-cell and MBB design



Extended wind and snow load tests

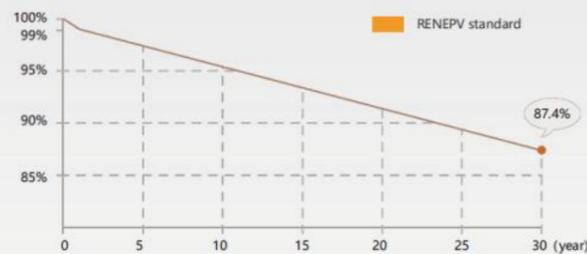


Withstanding harsh environment



Use scenario customization

QUALITY CERTIFICATION



First year power degradation <1%  
Annual degradation <0.4%

PRODUCT GUARANTEE

ISO 9001:2015 Quality management systems  
ISO 14001:2015 Environment management systems  
ISO 45001:2018 Occupational health and safety management systems  
IEC 61215 / IEC 61730 / IEC 61701 / IEC 62716  
TUV / CE / CQC / MCS / BIS / SASO / SGS / INMETRO



ELECTRICAL CHARACTERISTICS

Module Type	HD360M10PH-108		HD365M10PH-108		HD370M10PH-108		HD375M10PH-108		HD380M10PH-108		
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	
Working Conditions											
Maximum Power at STC/NMOT (Pmax)	W	360	269.3	365	273	370	276.8	375	280.5	380	284.2
Optimum Operating Voltage (Vmp)	V	32.62	30.33	33.05	30.73	33.32	30.99	33.48	31.14	34.24	31.84
Optimum Operating Current (Imp)	A	11.04	8.88	11.04	8.88	11.11	8.93	11.20	9.01	11.10	8.93
Open Circuit Voltage(Voc)+3%	V	37.53	34.90	37.75	35.10	38.18	35.51	38.39	35.71	39.47	36.71
Short Circuit Current(Isc)+3%	A	12.01	9.77	12.10	9.84	12.13	9.87	12.22	9.94	12.05	9.80
Module Efficiency	%	18.4		18.7		18.9		19.2		19.5	
Maximum System Voltage	V	1500 (DC)									
Maximum Series Fuse Rating	A	25									
Operating Module Temperature	°C	-40~+85									

STC: Irradiance 1000W/m<sup>2</sup> cell temperature 25°C, atmospheric quality AM1.5  
NMOT: Irradiance 800W/m<sup>2</sup>, ambient temperature 20°C, AM1.5, wind speed 1m/s

MECHANICAL CHARACTERISTICS

Solar Cell (No. of cells)	P-Mono 182x182 54PCS
Dimensions	1722x1134x30 mm
Weight	20.5 kg (±3%)
Glass	3.2mm Low-iron tempered glass/red
Frame	Anodized aluminum alloy/black
Junction Box	IP68 rated 3 bypass-diodes
Output Cables	4mm <sup>2</sup> /2x300mm or Customized length
Mechanical Load	
Safety Rate	Class II (IEC)

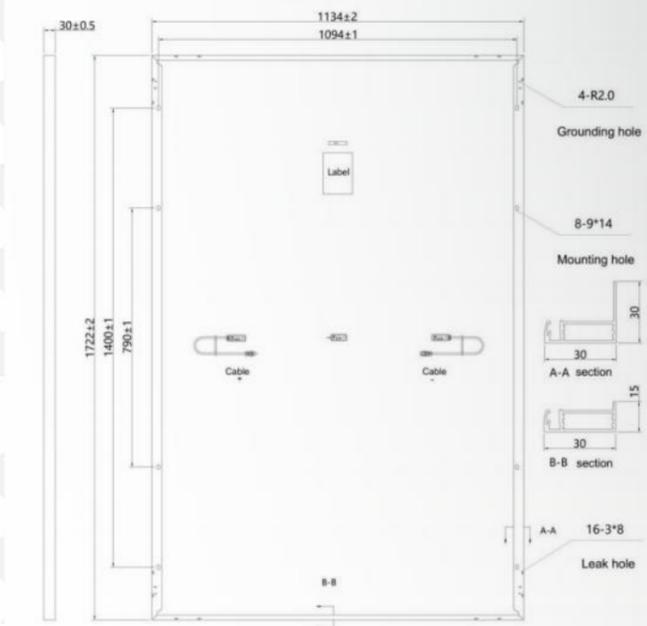
TEMPERATURE CHARACTERISTICS

Temperature Coefficient of Pmax	%/°C	-0.35
Temperature Coefficient of Voc	%/°C	-0.30
Temperature Coefficient of Isc	%/°C	+0.05
Nominal Module Operating Temperature	°C	45±2

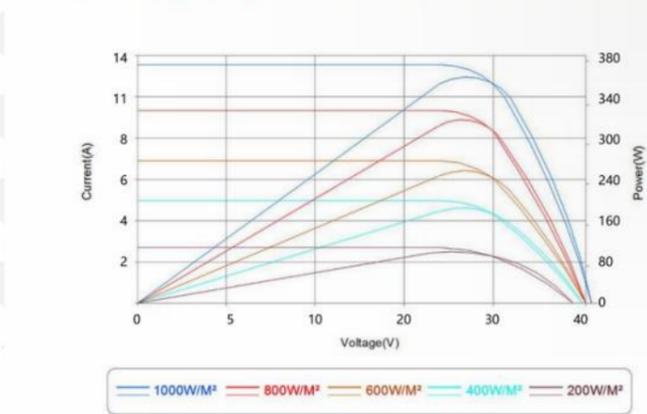
PACKING CONFIGURATION

Container	20'GP	40'HQ
Pieces per pallet (PCS)	37	37
Pallets per container (Pallet)	10	26
Pieces per container (PCS)	370	962
Domestic Transport	MEAS: 1750x1140x1260 mm	
9.6m	37 PCS/Pallet	20 Pallets/Truck 740 PCS/Truck
13.5m	37 PCS/Pallet	18 Pallets/Truck 1110 PCS/Truck
17.5m	37 PCS/Pallet	38 Pallets/Truck 1460 PCS/Truck

ASSEMBLY DRAWING (MM)



I-V CURVES (370W)



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HDxxxM10NHB-108  
0~+5W  
**420~440W**

TOPCon Mono-crystalline Bifacial Module



Materials and workmanship warranty



Linear performance warranty



**KEY FEATURES**



Outstanding performance in weak-light conditions



Lower operating temperature



Half-cell and MBB design



Extended wind and snow load tests

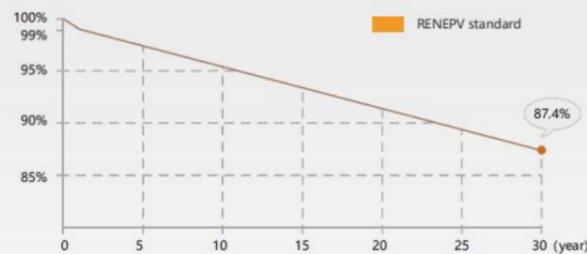


Withstanding harsh environment



Use scenario customization

**QUALITY CERTIFICATION**



First year power degradation <1%  
Annual degradation <0.4%

**PRODUCT GUARANTEE**

ISO 9001:2015 Quality management systems  
ISO 14001:2015 Environment management systems  
ISO 45001:2018 Occupational health and safety management systems  
IEC 61215 / IEC 61730 / IEC 61701 / IEC 62716  
TUV / CE / CQC / MCS / BIS / SASO / SGS / INMETRO



**ELECTRICAL CHARACTERISTICS**

Module Type	HD420M10NHB-108		HD425M10NHB-108		HD430M10NHB-108		HD435M10NHB-108		HD440M10NHB-108		
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	
Working Conditions	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	
Maximum Power at STC/NMOT (Pmax)	W	420	314.2	425	317.9	430	321.6	435	325.4	440	329.12
Optimum Operating Voltage (Vmp)	V	32.12	29.87	32.27	30.01	32.43	30.16	32.58	30.30	33.01	30.70
Optimum Operating Current (Imp)	A	13.07	10.52	13.17	10.59	13.26	10.66	13.32	10.74	13.33	10.72
Open Circuit Voltage(Voc)+3%	V	38.15	35.48	38.29	35.61	38.46	35.77	38.62	35.92	38.71	36.00
Short Circuit Current(Isc)+3%	A	13.61	11.21	13.72	11.30	13.82	11.38	13.88	11.47	14.13	11.57
Module Efficiency	%	21.5		21.8		22.0		22.3		22.5	
Maximum System Voltage	V	1500 (DC)									
Maximum Series Fuse Rating	A	25									
Operating Module Temperature	°C	-40~+85									

STC: Irradiance 1000W/m<sup>2</sup> cell temperature 25°C, atmospheric quality AM1.5  
NMOT: Irradiance 800W/m<sup>2</sup>, ambient temperature 20°C, AM1.5, wind speed 1m/s

**MECHANICAL CHARACTERISTICS**

Solar Cell (No. of cells)	N-Mono 182x182 54 PCS
Dimensions	1722x1134x30 mm
Weight	22.8 kg (±3%)
Glass	2.0+2.0mm Low-iron tempered glass
Frame	Anodized aluminum alloy
Junction Box	IP68 rated 3 bypass-diodes
Output Cables	4mm <sup>2</sup> /2x300mm or Customized length
Mechanical Load	
Safety Rate	Class II (IEC)

**TEMPERATURE CHARACTERISTICS**

Temperature Coefficient of Pmax	%/°C	-0.30
Temperature Coefficient of Voc	%/°C	-0.25
Temperature Coefficient of Isc	%/°C	+0.05
Nominal Module Operating Temperature	°C	45±2

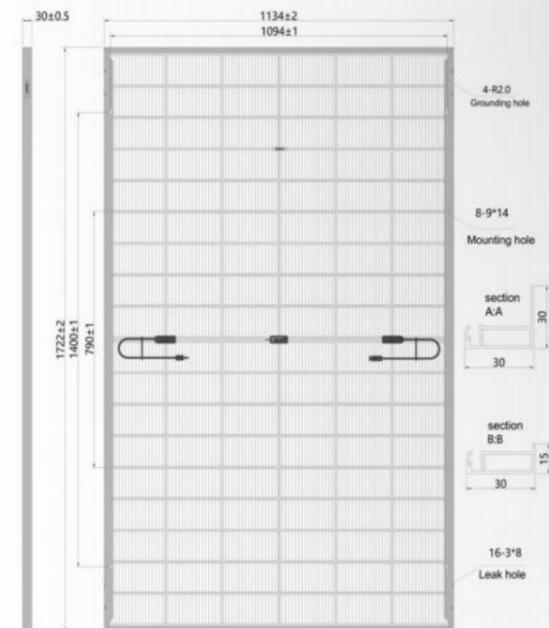
**DIFFERENT BACKSIDE POWER GAIN (435W)**

Power Gain	5%	15%	25%	
Maximum Power Pmp	W	456.8	500.3	543.8
Optimum Operating Voltage (Voc)	V	32.58	32.58	32.58
Optimum Operating Current (Imp)	A	14.02	15.35	16.69
Open Circuit Voltage (Voc)	V	38.62	38.62	38.62
Short Circuit Current (Isc)	A	14.97	16.40	17.82

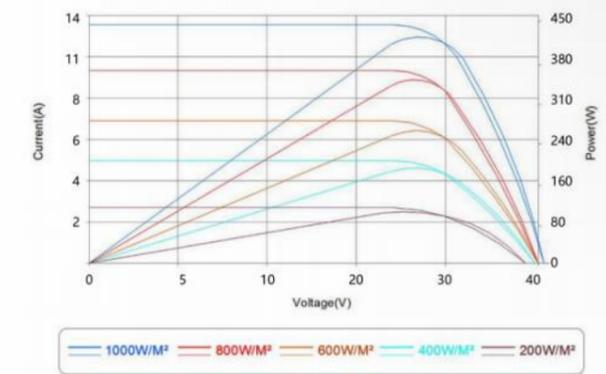
**PACKING CONFIGURATION**

Container 40'HQ	37 PCS/Pallet	26 Pallets/40'HQ	962 PCS/40'HQ
17.5m Land Truck	37 PCS/Pallet	36 Pallets/Truck	1332 PCS/Truck

**ASSEMBLY DRAWING (MM)**



**I-V CURVES (435W)**



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HDxxxG12RNHB-96  
0~+5W  
**440~460W**

TOPCon Mono-crystalline Bifacial Module



Materials and workmanship warranty



Linear performance warranty



KEY FEATURES



Outstanding performance in weak-light conditions



Lower operating temperature



Half-cell and MBB design



Extended wind and snow load tests

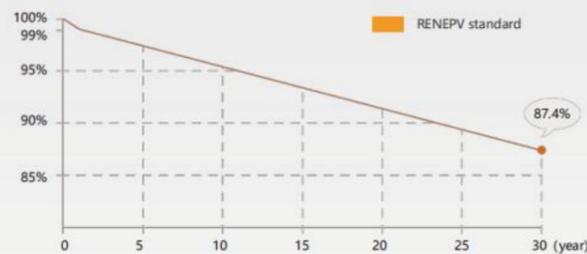


Withstanding harsh environment



Use scenario customization

QUALITY CERTIFICATION



First year power degradation <1%  
Annual degradation <0.4%

PRODUCT GUARANTEE

ISO 9001:2015 Quality management systems  
ISO 14001:2015 Environment management systems  
ISO 45001:2018 Occupational health and safety management systems  
IEC 61215 / IEC 61730 / IEC 61701 / IEC 62716  
TUV / CE / CQC / MCS / BIS / SASO / SGS / INMETRO



ELECTRICAL CHARACTERISTICS

Module Type	HD440G12RNHB-96		HD445G12RNHB-96		HD450G12RNHB-96		HD455G12RNHB-96		HD460G12RNHB-96		
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	
Working Conditions											
Maximum Power at STC/NMOT (P <sub>max</sub> )	W	440	330.9	445	334.6	450	338.4	455	342.2	460	345.9
Optimum Operating Voltage (V <sub>mp</sub> )	V	28.94	26.91	29.14	27.10	29.33	27.28	29.42	27.36	29.47	27.41
Optimum Operating Current (I <sub>mp</sub> )	A	15.20	12.29	15.27	12.35	15.34	12.41	15.47	12.51	15.61	12.62
Open Circuit Voltage (V <sub>oc</sub> )+3%	V	34.46	32.05	34.66	32.23	34.85	32.41	34.94	32.49	34.99	32.54
Short Circuit Current (I <sub>sc</sub> )+3%	A	16.14	13.05	16.21	13.11	16.28	13.17	16.40	13.26	16.54	13.37
Module Efficiency	%	22.0		22.2		22.5		22.8		23.0	
Maximum System Voltage	V	1500 (DC)									
Maximum Series Fuse Rating	A	25									
Operating Module Temperature	°C	-40~+85									

STC: Irradiance 1000W/m<sup>2</sup> cell temperature 25°C, atmospheric quality AM1.5  
NMOT: Irradiance 800W/m<sup>2</sup>, ambient temperature 20°C, AM1.5, wind speed 1m/s

MECHANICAL CHARACTERISTICS

Solar Cell (No. of cells)	N-Mono 182x210 48 PCS
Dimensions	1762x1134x30 mm
Weight	23.6 kg (±3%)
Glass	2.0+2.0mm Low-iron tempered glass
Frame	Anodized aluminum alloy
Junction Box	IP68 rated 3 bypass-diodes
Output Cables	4mm <sup>2</sup> /2x300mm or Customized length
Mechanical Load	
Safety Rate	Class II (IEC)

TEMPERATURE CHARACTERISTICS

Temperature Coefficient of P <sub>max</sub>	%/°C	-0.30
Temperature Coefficient of V <sub>oc</sub>	%/°C	-0.25
Temperature Coefficient of I <sub>sc</sub>	%/°C	+0.05
Nominal Module Operating Temperature	°C	45±2

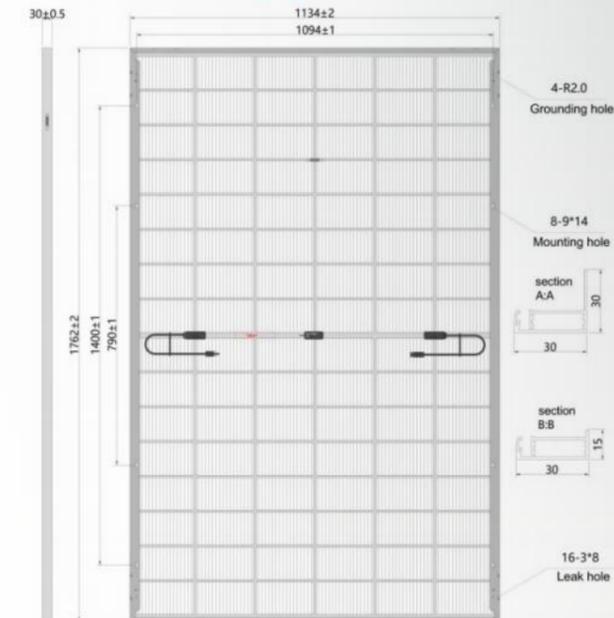
DIFFERENT BACKSIDE POWER GAIN (440W)

Power Gain		5%	15%	25%
Maximum Power P <sub>mp</sub>	W	462.0	506.0	550.0
Optimum Operating Voltage (V <sub>oc</sub> )	V	28.94	28.94	28.94
Optimum Operating Current (I <sub>mp</sub> )	A	15.96	17.48	19.00
Open Circuit Voltage (V <sub>oc</sub> )	V	34.46	34.46	34.46
Short Circuit Current (I <sub>sc</sub> )	A	16.97	18.59	20.20

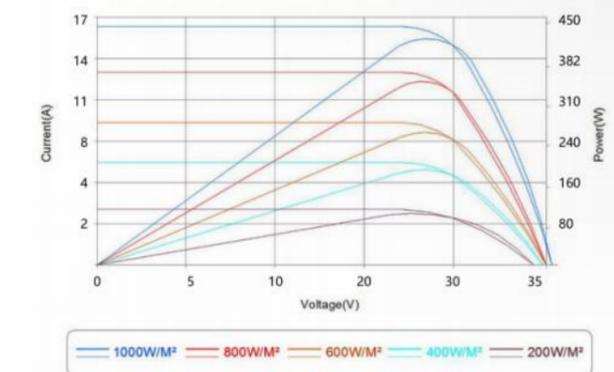
PACKING CONFIGURATION

Container 40'HQ	37 PCS/Pallet	26 Pallets/40'HQ	962 PCS/40'HQ
17.5m Land Truck	37 PCS/Pallet	36 Pallets/Truck	1332 PCS/Truck

ASSEMBLY DRAWING (MM)



I-V CURVES (440W)



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HDxxxG12RNHB-108

0~+5W

**500~520W**

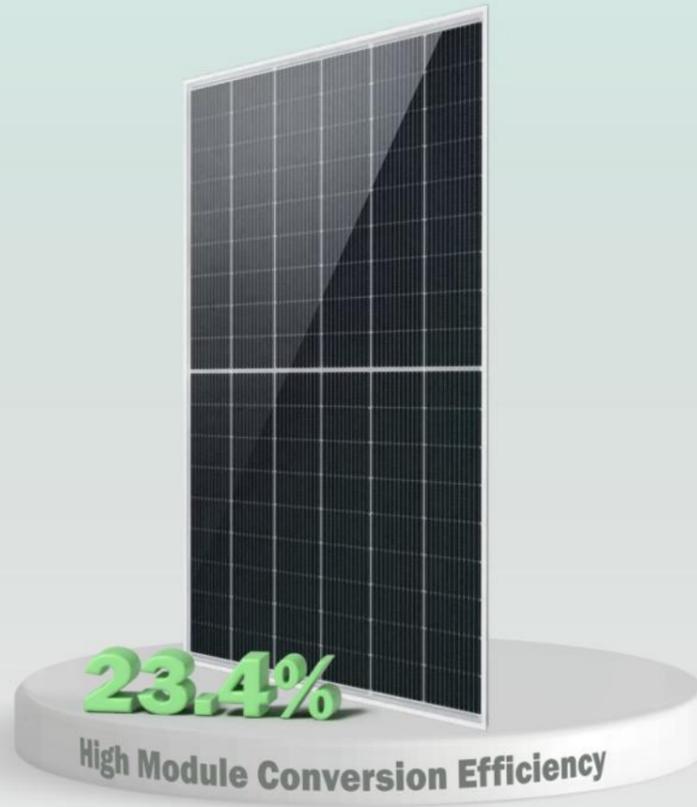
TOPCon Mono-crystalline Bifacial Module



Materials and workmanship warranty



Linear performance warranty



**KEY FEATURES**



Outstanding performance in weak-light conditions



Lower operating temperature



Half-cell and MBB design



Extended wind and snow load tests

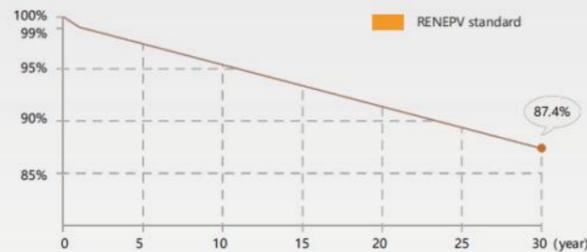


Withstanding harsh environment



Use scenario customization

**QUALITY CERTIFICATION**



First year power degradation <1%  
Annual degradation <0.4%

**PRODUCT GUARANTEE**

ISO 9001:2015 Quality management systems  
ISO 14001:2015 Environment management systems  
ISO 45001:2018 Occupational health and safety management systems  
IEC 61215 / IEC 61730 / IEC 61701 / IEC 62716  
TUV / CE / CQC / MCS / BIS / SASO / SGS / INMETRO



**ELECTRICAL CHARACTERISTICS**

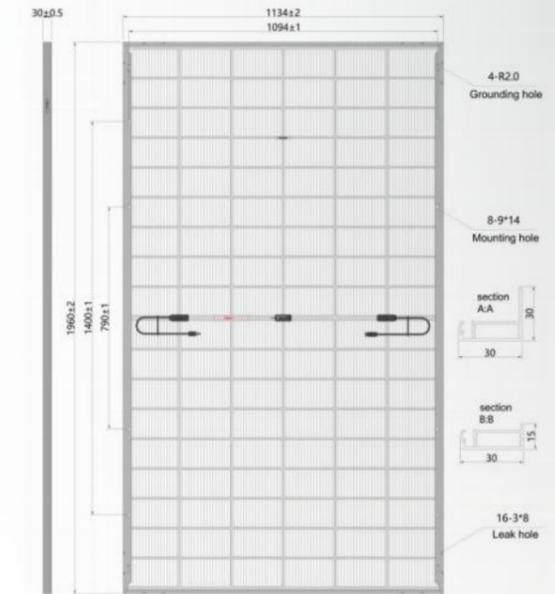
Module Type	HD500G12RNHB-108		HD505G12RNHB-108		HD520G12RNHB-108		HD525G12RNHB-108		HD530G12RNHB-108		
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	
Working Conditions	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	
Maximum Power at STC/NMOT (Pmax)	W	500	376.0	505	379.8	510	383.5	515	387.3	520	391.0
Optimum Operating Voltage (Vmp)	V	32.78	30.49	32.94	30.63	33.10	30.78	33.16	30.84	33.29	30.96
Optimum Operating Current (Imp)	A	15.25	12.33	15.33	12.40	15.41	12.46	15.53	12.56	15.62	12.63
Open Circuit Voltage(Voc)+ 3%	V	38.99	36.26	39.15	36.41	39.15	36.56	39.37	36.61	39.50	36.73
Short Circuit Current(Isc)+ 3%	A	16.19	13.09	16.27	13.15	16.34	13.21	16.45	13.30	16.53	13.73
Module Efficiency	%	22.5		22.7		22.9		23.2		23.4	
Maximum System Voltage	V	1500 (DC)									
Maximum Series Fuse Rating	A	25									
Operating Module Temperature	°C	-40~+85									

STC: Irradiance 1000W/m<sup>2</sup> cell temperature 25°C, atmospheric quality AM1.5  
NMOT: Irradiance 800W/m<sup>2</sup>, ambient temperature 20°C, AM1.5, wind speed 1m/s

**MECHANICAL CHARACTERISTICS**

Solar Cell (No. of cells)	N-Mono 182x210 54 PCS
Dimensions	1960x1134x30 mm
Weight	26.2 kg (±3%)
Glass	2.0+2.0mm Low-iron tempered glass
Frame	Anodized aluminum alloy
Junction Box	IP68 rated 3 bypass-diodes
Output Cables	4mm <sup>2</sup> /2x300mm or Cu storized length
Mechanical Load	
Safety Rate	Class II (IEC)

**ASSEMBLY DRAWING (MM)**



**TEMPERATURE CHARACTERISTICS**

Temperature Coefficient of Pmax	%/°C	-0.30
Temperature Coefficient of Voc	%/°C	-0.25
Temperature Coefficient of Isc	%/°C	+0.05
Nominal Module Operating Temperature	°C	45±2

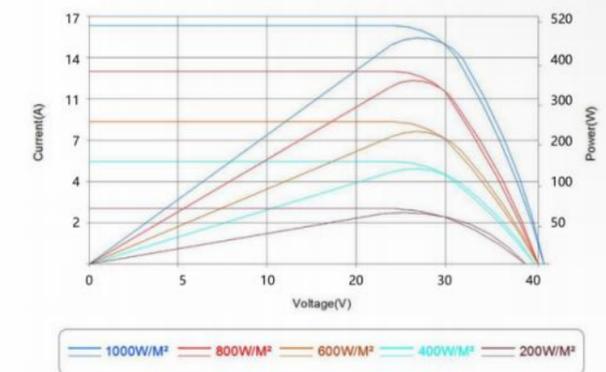
**DIFFERENT BACKSIDE POWER GAIN (500W)**

Power Gain	5%	15%	25%	
Maximum Power Pmp	W	525.0	575.0	625.0
Optimum Operating Voltage (Voc)	V	32.78	32.78	32.78
Optimum Operating Current (Imp)	A	16.02	17.54	19.07
Open Circuit Voltage (Voc)	V	38.99	38.99	38.99
Short Circuit Current (Isc)	A	17.04	18.67	20.29

**PACKING CONFIGURATION**

Container 40'HQ	37 PCS/Pallet	24 Pallets/40'HQ	888 PCS/40'HQ
17.5m Land Truck	37 PCS/Pallet	30 Pallets/Truck	1110 PCS/Truck

**I-V CURVES (500W)**



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0~+5W  
10~360W

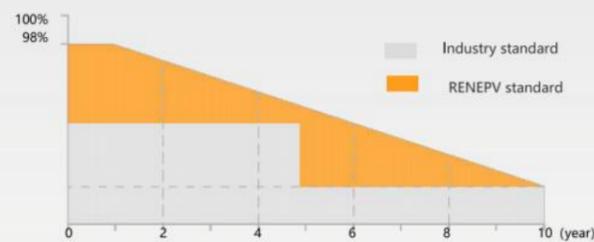


# CUSTOMIZED MODULES

## KEY FEATURES

- Outstanding performance in weak-light conditions
- Lower operating temperature
- Half-cell and MBB design
- Extended wind and snow load tests
- Withstanding harsh environment
- Use scenario customization

## QUALITY CERTIFICATION



First year power degradation <1%  
Annual degradation <0.4%

## PRODUCT GUARANTEE

ISO 9001:2015 Quality management systems  
ISO 14001:2015 Environment management systems  
ISO 45001:2018 Occupational health and safety management systems  
IEC 61215 / IEC 61730 / IEC 61701 / IEC 62716  
TUV / CE / CQC / MCS / BIS / SASO / SGS / INMETRO



## Mono-182 Cut-cell Module

Module Type	Max. Power (W) ± 3%	Dimensions (mm)	Solar Cell / Type	Weight (kg) ± 3%	Vmp (V)	Imp (A)	Voc (V) ± 3%	Isc (A) ± 3%
HD10M10C-32	10	300×220×15	45.5×30/4×8	0.8	18.18	0.55	21.48	0.59
HD20M10C-32	20	420×280×18	60.6×45.5/4×8	1.2	18.19	1.1	21.52	1.19
HD30M10C-32	30	420×400×20	91×45.5/4×8	2.2	18.19	1.65	21.56	1.78
HD40M10C-32	40	540×400×20	91×45.5/4×8	2.8	18.2	2.2	21.58	2.38
HD50M10C-32	50	655×400×25	182×36.4/2×16	3.2	18.25	2.74	21.64	2.97
HD60M10C-32	60	800×400×25	182×45.5/2×16	3.6	18.3	3.28	21.68	3.56
HD70M10C-33	70	630×580×25	182×52/3×11	4	18.62	3.76	21.96	4.08
HD80M10C-33	80	730×580×25	182×60.6/3×11	4.6	18.69	4.28	22.02	4.65
HD90M10C-33	90	808×580×25	182×68/3×11	5.2	18.75	4.8	22.06	5.24
HD100M10C-33	100	865×580×30	182×72/3×11	5.6	18.73	5.34	22.1	5.75
HD110M10C-33	110	950×580×30	182×80/3×11	6	18.77	5.86	22.12	6.32
HD120M10H-33	120	1060×580×30	182×91/3×11	6.4	18.84	6.37	22.16	6.86
HD130M10H-36	130	1160×580×30	182×91/3×12	7	20.57	6.32	24.08	6.88
HD140M10H-39	140	1250×580×30	182×91/3×13	7.6	21.95	6.38	25.93	6.92
HD150M10H-40	150	975×765×30	182×91/4×10	8	22.46	6.68	26.48	7.22
HD160M10H-44	160	1065×765×30	182×91/4×11	8.6	24.93	6.42	28.86	7.06
HD180M10H-48	180	1160×765×30	182×91/4×12	9.4	27.36	6.58	32.12	7.12
HD190M10H-52	190	1250×765×30	182×91/4×13	10	29.46	6.45	34.68	6.98
HD200M10H-56	200	1345×765×30	182×91/4×14	10.8	31.75	6.3	37.25	6.84
HD220M10H-60	220	1435×765×30	182×91/4×15	11.6	33.85	6.5	40.12	6.96
HD240M10H-64	240	1530×765×30	182×91/4×16	12.4	36.26	6.62	42.58	7.16
HD250M10H-68	250	1620×765×30	182×91/4×17	12.4	38.7	6.46	45.48	6.98
HD270M10H-72	270	1160×1134×30	182×91/6×12	13.8	40.6	6.65	48.88	7.08
HD310M10H-84	310	1350×1134×30	182×91/6×7×2	16	23.83	13.01	28.16	13.72
HD360M10H-96	360	1540×1134×30	182×91/6×8×2	18.5	27.56	13.06	33.06	13.78

## G12N /210 Cut-cell Module

Module Type	Max. Power (W)	Dimensions (mm)	Solar Cell /Type	Weight (kg) ± 3%	Vmp (V)	Imp (A)	Voc (V) ± 3%	Isc (A) ± 3%
HD80G12NF-32	80	915×456×30	210×52.5/2×16	5	18.78	4.26	22.12	4.6
HD120G12NT-33	120	836×665×30	210×70/3×11	6.6	19.48	6.16	23.02	6.64
HD180G12NH-33	180	1220×665×30	210×105/3×11	9.6	19.52	9.22	23.16	9.86
HD230G12NT-64	230	1212×880×30	210×70/4×8×2	12.8	19.28	11.92	22.48	12.54
HD260G12NT-72	260	1356×880×30	210×70/4×9×2	14.2	21.51	12.09	24.86	12.66
HD330G12NH-60	330	1640×880×30	210×105/4×15	15	35.95	9.18	42.08	9.74
HD350G12NH-64	350	1762×880×30	210×105/4×16	16.2	38.01	9.21	42.12	9.81
HD390G12NH-72	390	1960×880×30	210×105/4×18	18.2	42.03	9.28	50.36	9.34

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**TOPCon Mono-crystalline PV Module**

M182-60N  
**HD500M10NH-120(HV)**

**500W**

182 Cell-16BB | Non-destructive Cut | Monofacial



**High Power**  
**High Compatibility**



Outstanding performance in weak-light conditions, lower operating temperature



Different types of modules are suitable for various application scenarios



Suitable for high voltage equipment such as water pump

**ELECTRICAL SPECIFICATIONS**

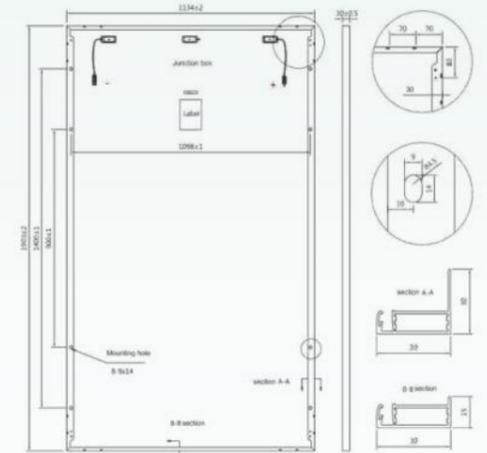
Module Type	HD500M10NH-120(HV)		
STC: AM1.5 Temperature 25°C Irradiance 1000 W/m <sup>2</sup>	Peak Power(Pmax)±3%	(W)	500
	Power Tolerance	(W)	0~+5
	Max.Power Voltage(Vmp)	(V)	72.26
	Max.Power Current(Imp)	(A)	6.92
	Open-circuit Voltage(Voc)±3%	(V)	84.56
	Short-circuit Current(Isc)+3%	(A)	7.48
NMOT: AM1.5 Temperature 20°C Wind speed 1m/s Irradiance 800 W/m <sup>2</sup>	Peak Power(Pmax)±3%	(W)	373
	Max.Power Voltage(Vmp)	(V)	67.24
	Max.Power Current(Imp)	(A)	5.55
	Open-circuit Voltage(Voc)	(V)	78.64
	Short-circuit Current(Isc)	(A)	6.14
	Operating Temperature	(°C)	-40~+85
Max. Series Fuse Rating	(A)	20A10 Rectifier diode	
Max. System Voltage(DC)	(V)	1000 (DC)	

Mono Single Glass  
High Voltage Module



**MECHANICAL SPECIFICATIONS**

Solar Cells	N-Mono-182*91mm
Arrangement	Type-6*20
Front Glass	3.2mm tempered glass
Backsheet	Fluoride on both sides
Frame	Anodized aluminium alloy
Junction Box	IP68, 3 diodes
Cables	4.0mm <sup>2</sup> photovoltaic cables
Connectors	MC4 compatible/IP68
Maximum Load Capacity	Snow-5400Pa / Wind-2400Pa
Safety Rate	Class II (IEC)
Fire Rate	Class C (TUV)



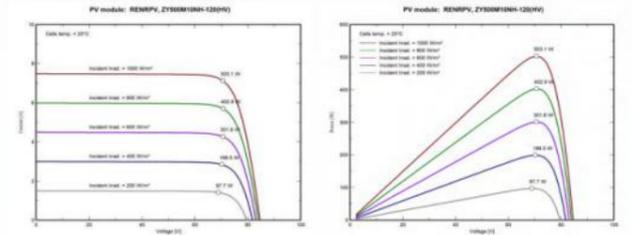
**PACKING CONFIGURATION**

Package Weight & Size	900 Kg/Pallet & 1940*1140*1260mm		
20'GP Container	2 Pcs/Carton	186 Cartons/20'GP	372 Pcs
40'HQ Container	37 Pcs/Pallet	24 Pallets/40'HQ	888 Pcs
13.5m Land Truck	37 Pcs/Pallet	26 Pallets/Truck	962 Pcs

**DIMENSIONS OF PV MODULE**

Module Dimensions	1903(±2) * 1134(±2) * 30 mm
Module Weight	23.0 kg (±3%)

**I-V & P-V CURVES**



Current-Voltage Characteristic      Power-Voltage Characteristic

**TEMPERATURE CHARACTERISTICS**

Temperature Coefficient (Pmax)	δ [%/°C]	-0.35
Temperature Coefficient (Voc)	β [%/°C]	-0.29
Temperature Coefficient (Isc)	α [%/°C]	+0.046
Nominal Operating Cell Temperature	NMOT	44°C ± 2°C

**CONFIGURATION**

	Default	Choose
Frame Color	<input type="checkbox"/> Silver	<input type="checkbox"/> Black
Backsheet Color	<input type="checkbox"/> White	<input type="checkbox"/> Transparent <input type="checkbox"/> Black
Cable Length	<input type="checkbox"/> 300mm	<input type="checkbox"/> Customization
Connectors	<input type="checkbox"/> Compatible MC4	<input checked="" type="checkbox"/> Original EVO2

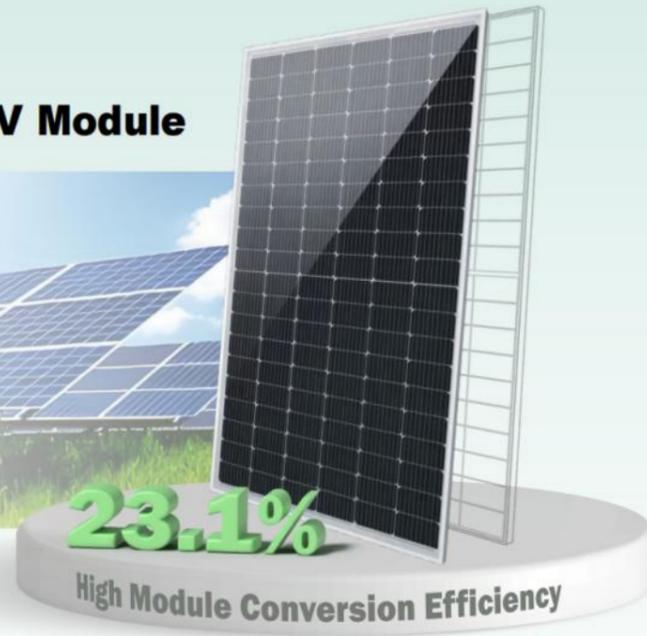
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**TOPCon Mono-crystalline PV Module**

M182-66N  
**HD550M10NH-132(HV)**

**550W**

182 Cell-16BB | Non-destructive Cut | Monofacial



**High Power  
High Compatibility**



Outstanding performance in weak-light conditions, lower operating temperature



Different types of modules are suitable for various application scenarios



Suitable for high voltage equipment such as water pump

**ELECTRICAL SPECIFICATIONS**

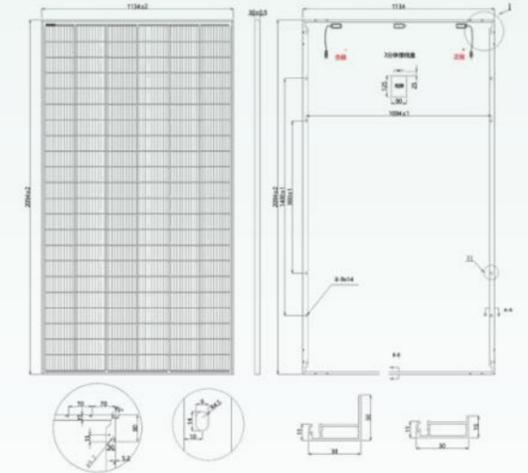
Module Type	HD500M10NH-120(HV)		
STC: AM1.5 Temperature 25°C Irradiance 1000 W/m <sup>2</sup>	Peak Power(P <sub>max</sub> )±3%	(W)	550
	Power Tolerance	(W)	0~+5
	Max.Power Voltage(V <sub>mp</sub> )	(V)	80.18
	Max.Power Current(I <sub>mp</sub> )	(A)	6.86
	Open-circuit Voltage(V <sub>oc</sub> )±3%	(V)	92.48
NMOT: AM1.5 Temperature 20°C Wind speed 1m/s Irradiance 800 W/m <sup>2</sup>	Short-circuit Current(I <sub>sc</sub> )±3%	(A)	7.47
	Peak Power(P <sub>max</sub> )±3%	(W)	412
	Max.Power Voltage(V <sub>mp</sub> )	(V)	74.64
	Max.Power Current(I <sub>mp</sub> )	(A)	5.52
	Open-circuit Voltage(V <sub>oc</sub> )	(V)	86.06
Operating Temperature	(°C)		-40~+85
Max. Series Fuse Rating	(A)		20A10 Rectifier diode
Max. System Voltage(DC)	(V)		1000 (DC)

Mono Single Glass  
High Voltage Module



**MECHANICAL SPECIFICATIONS**

Solar Cells	N-Mono-182*91mm
Arrangement	Type-6*22
Front Glass	3.2mm tempered glass
Backsheet	Fluoride on both sides
Frame	Anodized aluminium alloy
Junction Box	IP 68, 3 diodes
Cables	4.0mm <sup>2</sup> photovoltaic cables
Connectors	MC4 compatible/IP68
Maximum Load Capacity	Snow-5400Pa / Wind-2400Pa
Safety Rate	Class II (IEC)
Fire Rate	Class C (TUV)



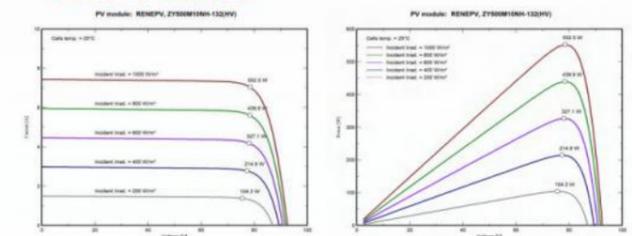
**PACKING CONFIGURATION**

Package Weight & Size	937 Kg/Pallet & 2125*1140*1260mm		
20'GP Container	2 Pcs/Cartron	166 Cartons/20'GP	332 Pcs
40'HQ Container	37 Pcs/Pallet	22 Pallets/40'HQ	814 Pcs
13.5m Land Truck	37 Pcs/Pallet	24 Pallets/Truck	888 Pcs

**DIMENSIONS OF PV MODULE**

Module Dimensions	2094 (±2) * 1134 (±2) * 30 mm
Module Weight	24.5 kg (±3%)

**I-V & P-V CURVES**



Current-Voltage Characteristic

Power-Voltage Characteristic

**TEMPERATURE CHARACTERISTICS**

Temperature Coefficient (P <sub>max</sub> )	δ [%/°C]	-0.35
Temperature Coefficient (V <sub>oc</sub> )	β [%/°C]	-0.29
Temperature Coefficient (I <sub>sc</sub> )	α [%/°C]	+0.046
Nominal Operating Cell Temperature	NMOT	44°C ± 2°C

**CONFIGURATION**

	Default	Choose
Frame Color	<input type="checkbox"/> Silver	<input type="checkbox"/> Black
Backsheet Color	<input type="checkbox"/> White	<input type="checkbox"/> Transparent <input type="checkbox"/> Black
Cable Length	<input type="checkbox"/> 300mm	<input type="checkbox"/> Customization
Connectors	<input type="checkbox"/> Compatible MC4	<input type="checkbox"/> Original EVO2

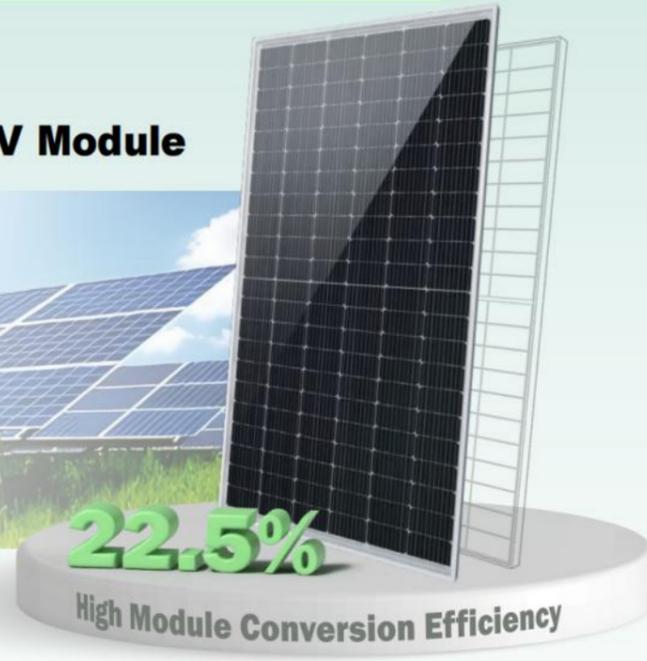
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**TOPCon Mono-crystalline PV Module**

M182-72N  
**HD580M10NH-114(HV)**

**580W**

182 Cell-16BB | Non-destructive Cut | Monofacial



**High Power**  
**High Compatibility**



Outstanding performance in weak-light conditions, lower operating temperature



Different types of modules are suitable for various application scenarios



Suitable for high voltage equipment such as water pump

**ELECTRICAL SPECIFICATIONS**

Module Type	HD500M10NH-120(HV)		
STC: AM1.5 Temperature 25°C Irradiance 1000 W/m <sup>2</sup>	Peak Power(P <sub>max</sub> )±3%	(W)	580
	Power Tolerance	(W)	0~+5
	Max.Power Voltage(V <sub>mp</sub> )	(V)	87.66
	Max.Power Current(I <sub>mp</sub> )	(A)	6.62
	Open-circuit Voltage(V <sub>oc</sub> )±3%	(V)	103.08
NMOT: AM1.5 Temperature 20°C Wind speed 1m/s Irradiance 800 W/m <sup>2</sup>	Short-circuit Current(I <sub>sc</sub> )±3%	(A)	7.04
	Peak Power(P <sub>max</sub> )±3%	(W)	433.8
	Max.Power Voltage(V <sub>mp</sub> )	(V)	81.64
	Max.Power Current(I <sub>mp</sub> )	(A)	5.32
	Open-circuit Voltage(V <sub>oc</sub> )	(V)	95.86
Operating Temperature	(°C)		-40~+85
Max. Series Fuse Rating	(A)		20A10 Rectifier diode
Max. System Voltage(DC)	(V)		1000 (DC)

Mono Single Glass  
High Voltage Module



Product Warranty



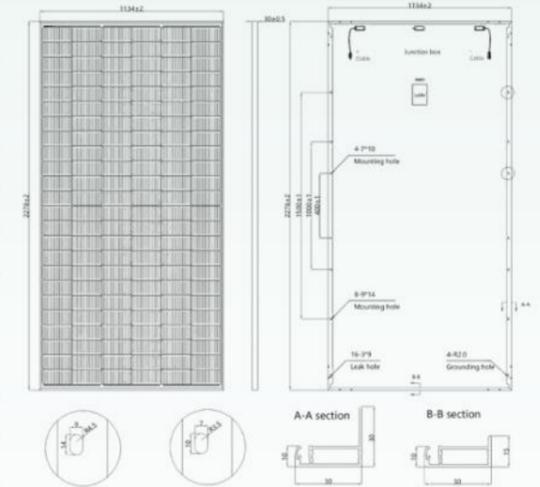
Performance Warranty (Monofacial)



Performance Warranty (Bifacial)

**MECHANICAL SPECIFICATIONS**

Solar Cells	N-Mono-182*91mm
Arrangement	Type-6*24
Front Glass	3.2mm tempered glass
Backsheet	Fluoride on both sides
Frame	Anodized aluminium alloy
Junction Box	IP 68, 3 diodes
Cables	4.0mm <sup>2</sup> photovoltaic cables
Connectors	MC4 compatible/IP68
Maximum Load Capacity	Snow-5400Pa / Wind-2400Pa
Safety Rate	Class II (IEC)
Fire Rate	Class C (TUV)



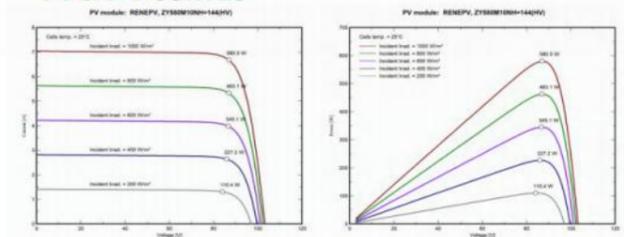
**PACKING CONFIGURATION**

Package Weight & Size	1076 Kg/Pallet & 2310*1130*1260mm		
20'GP Container	2 Pcs/ Carton	155 Cartons/20'GP	310 Pcs
40'HQ Container	37 Pcs/Pallet	20 Pallets/40'HQ	740 Pcs
13.5m Land Truck	37 Pcs/Pallet	22 Pallets/Truck	814 Pcs

**DIMENSIONS OF PV MODULE**

Module Dimensions	2278(±2) * 1134(±2) * 30 mm
Module Weight	27.2 kg (±3%)

**I-V & P-V CURVES**



Current-Voltage Characteristic

Power-Voltage Characteristic

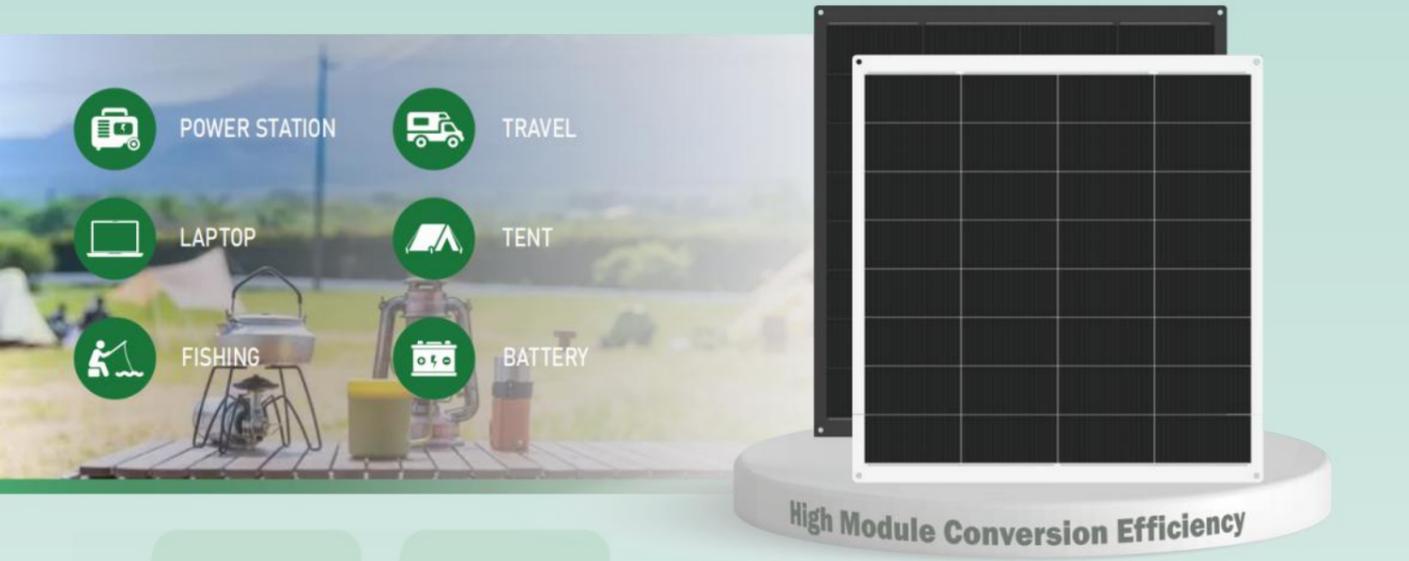
**TEMPERATURE CHARACTERISTICS**

Temperature Coefficient (P <sub>max</sub> )	δ [%/°C]	-0.30
Temperature Coefficient (V <sub>oc</sub> )	β [%/°C]	-0.29
Temperature Coefficient (I <sub>sc</sub> )	α [%/°C]	+0.05
Nominal Operating Cell Temperature	NMOT	45°C ± 2°C

**CONFIGURATION**

	Default	Choose
Frame Color	<input type="checkbox"/> Silver	<input type="checkbox"/> Black
Backsheet Color	<input type="checkbox"/> White	<input type="checkbox"/> Transparent <input type="checkbox"/> Black
Cable Length	<input type="checkbox"/> 300mm	<input type="checkbox"/> Customization
Connectors	<input type="checkbox"/> Compatible MC4	<input type="checkbox"/> Original EVO2

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**160W / 165W / 170W / 175W**



## N-HJT Mono-crystalline Flexible PV Module

- High-Efficiency N-Type HJT Cells
- Ultra-Low Temperature Coefficient
- Excellent Low-Light Performance
- Lightweight & Ultra-Flexible Design
- Enhanced Durability & Weather Resistance
- Lower Annual Degradation
- Easy Installation & Wide Applicability
- Eco-Friendly & Lead-Free



### ELECTRICAL CHARACTERISTICS

Electrical Specifications		RFMG12NH4-160(FB)	RFMG12NH4-165(FB)	RFMG12NH4-170(W)	RFMG12NH4-175(W)
Module Type					
Peak Power(Pmax)±3%	W	160	165	170	175
Power Tolerance	W	0~+5	0~+5	0~+5	0~+5
Max.Power Voltage (Vmp)	V	19.52	19.68	19.84	19.98
Max.Power Current (Imp)	A	8.20	8.38	8.57	8.76
Open-circuit Voltage(Voc)±3%	V	22.40	22.58	22.76	22.94
Short-circuit Current(Isc)+3%	A	8.98	9.19	9.40	9.60
Module Efficiency	%	19.1	19.7	20.3	20.9
STC: AM1.5, Temperature 25°C, Irradiance 1000 W/m <sup>2</sup>					

### MECHANICAL SPECIFICATIONS

Solar Cells	N-Mono-210*105mm
Arrangement	Type-4*8
Front Sheet	ETFE composite membrane
Back Sheet	PET composite membrane
Junction Box	IP67, 2 diodes
Cables	2.5mm <sup>2</sup> photovoltaic cables
Connectors	MC4 compatible/IP67
Application Class	Class A
Safety Rate	Class II (IEC)
Fire Rate	Class C (TUV)

### PACKING CONFIGURATION

Package Weight & Size	270 Kg/Pallet & 980*1120*1060mm		
20'GP Container	62 Pcs/Box	24 Boxes/20' GP	1488 Pcs
40'HQ Container	62 Pcs/Box	48 Boxes/40'HQ	2976 Pcs

### DIMENSIONS OF PV MODULE

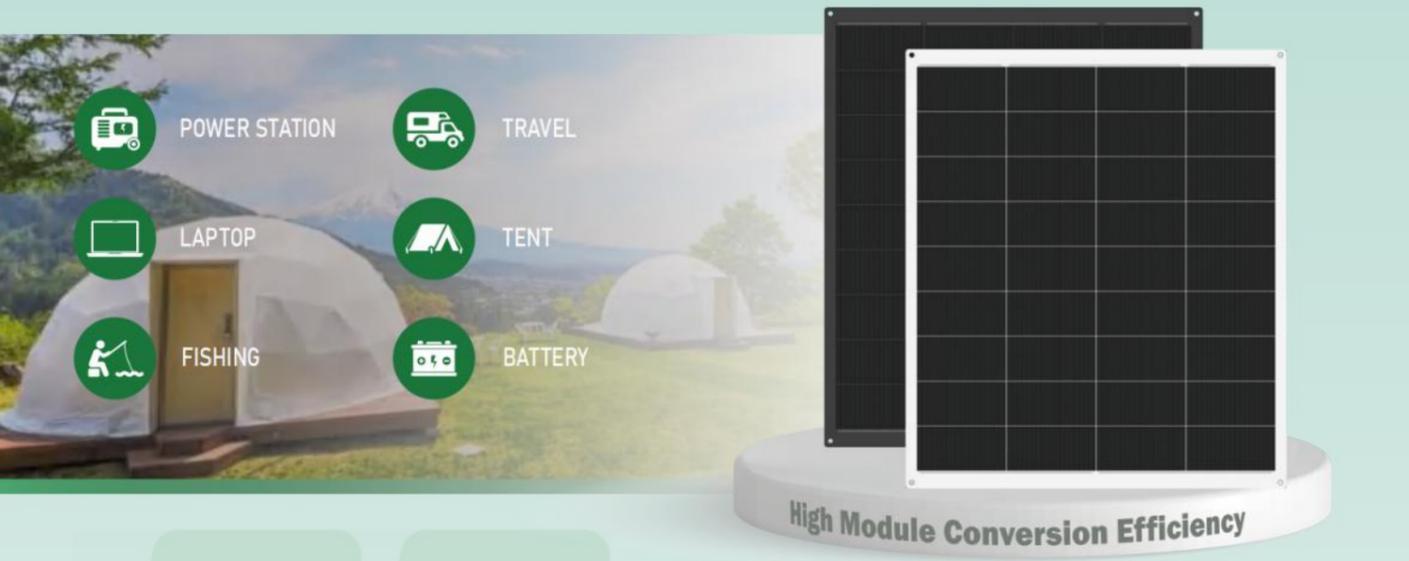
Module Dimensions	930(±2)*900(±2)*3mm
Module Weight	2.9 kg(±3%)

### TEMPERATURE CHARACTERISTICS & OPERATING CONDITIONS

Temperature Coefficient (Pmax)	δ [%/°C]	-0.30
Temperature Coefficient (Voc)	β [%/°C]	-0.25
Temperature Coefficient (Isc)	α [%/°C]	+0.045
Nominal Operating Cell Temperature	NMOT	44°C ± 2°C
Operating Temperature	°C	-20 ~ +65
Max. Series Fuse Rating	(A)	15
Max. System Voltage (DC)	(V)	1500 (IEC)

### CONFIGURATION

Backsheet Color	White	Black
Cable Length	450mm	Customization
Connectors	Compatible MC4	Original EVO2



**180W / 185W / 190W / 195W**



## N-HJT Mono-crystalline Flexible PV Module

- High-Efficiency N-Type HJT Cells
- Ultra-Low Temperature Coefficient
- Excellent Low-Light Performance
- Lightweight & Ultra-Flexible Design
- Enhanced Durability & Weather Resistance
- Lower Annual Degradation
- Easy Installation & Wide Applicability
- Eco-Friendly & Lead-Free



### ELECTRICAL CHARACTERISTICS

Electrical Specifications		RFMG12NH4-180(FB)	RFMG12NH4-185(FB)	RFMG12NH4-190(W)	RFMG12NH4-195(W)
Module Type					
Peak Power(Pmax)±3%	W	180	185	190	195
Power Tolerance	W	0~+5	0~+5	0~+5	0~+5
Max.Power Voltage (Vmp)	V	21.96	22.12	22.28	22.44
Max.Power Current (Imp)	A	8.20	8.36	8.53	8.69
Open-circuit Voltage(Voc)±3%	V	25.03	25.21	25.39	25.57
Short-circuit Current(Isc)+3%	A	9.05	9.23	9.41	9.59
Module Efficiency	%	19.2	19.8	20.3	20.8
STC: AM1.5, Temperature 25°C, Irradiance 1000 W/m²					

### MECHANICAL SPECIFICATIONS

Solar Cells	N-Mono-210*105mm
Arrangement	Type-4*9
Front Sheet	ETFE composite membrane
Back Sheet	PET composite membrane
Junction Box	IP67, 2 diodes
Cables	2.5mm² photovoltaic cables
Connectors	MC4 compatible/IP67
Application Class	Class A
Safety Rate	Class II (IEC)
Fire Rate	Class C (TUV)

### PACKING CONFIGURATION

Package Weight & Size	320 Kg/Pallet & 1090*1120*1060mm		
20'GP Container	62 Pcs/Box	20 Boxes/20'GP	1240 Pcs
40'HQ Container	62 Pcs/box	44 Boxes/40'HQ	2728 Pcs

### DIMENSIONS OF PV MODULE

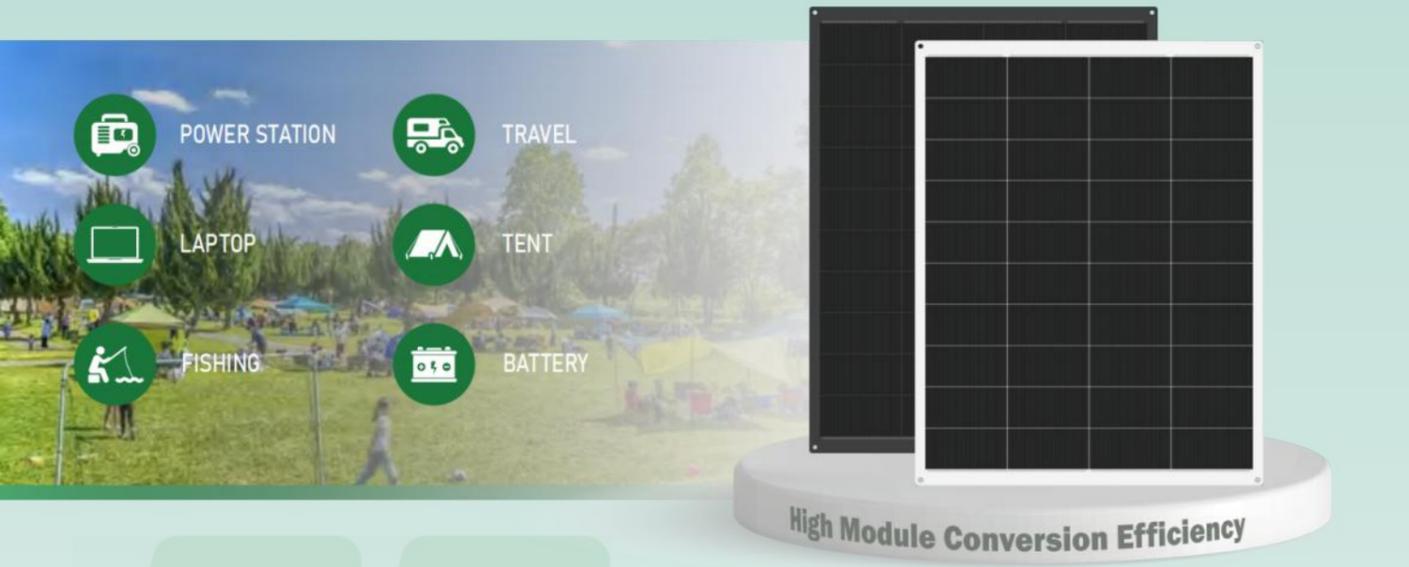
Module Dimensions	1040(±3)×900(±3)×3mm
Module Weight	3.3kg(±3%)

### TEMPERATURE CHARACTERISTICS & OPERATING CONDITIONS

Temperature Coefficient (Pmax)	δ [%/°C]	-0.30
Temperature Coefficient (Voc)	β [%/°C]	-0.25
Temperature Coefficient (Is)	α [%/°C]	+0.045
Nominal Operating Cell Temperature	NMOT	44°C ± 2°C
Operating Temperature	°C	-20 ~ +65
Max. Series Fuse Rating	(A)	15
Max. System Voltage (DC)	(V)	1500 (IEC)

### CONFIGURATION

Backsheet Color	White	Black
Cable Length	450mm	Customization
Connectors	Compatible MC4	Original EVO2



**200W / 210W / 215W / 220W**



## N-HJT Mono-crystalline Flexible PV Module

- High-Efficiency N-Type HJT Cells
- Ultra-Low Temperature Coefficient
- Excellent Low-Light Performance
- Lightweight & Ultra-Flexible Design
- Enhanced Durability & Weather Resistance
- Lower Annual Degradation
- Easy Installation & Wide Applicability
- Eco-Friendly & Lead-Free



### ELECTRICAL CHARACTERISTICS

Electrical Specifications		RFMG12NH4-200(FB)	RFMG12NH4-210(FB)	RFMG12NH4-215(W)	RFMG12NH4-220(W)
Module Type					
Peak Power(Pmax)±3%	W	200	210	215	220
Power Tolerance	W	0~+5	0~+5	0~+5	0~+5
Max.Power Voltage (Vmp)	V	24.40	24.56	24.72	24.88
Max.Power Current (Imp)	A	8.20	8.55	8.70	8.84
Open-circuit Voltage(Voc)±3%	V	27.87	28.00	28.18	28.36
Short-circuit Current(Isc)+3%	A	9.04	9.43	9.60	9.76
Module Efficiency	%	19.5	20.5	21.0	21.4
STC: AM1.5, Temperature 25°C, Irradiance 1000 W/m²					

### MECHANICAL SPECIFICATIONS

Solar Cells	N-Mono-210*105mm
Arrangement	Type-4*10
Front Sheet	ETFE composite membrane
Back Sheet	PET composite membrane
Junction Box	IP67, 2 diodes
Cables	4.0mm² photovoltaic cables
Connectors	MC4 compatible/IP67
Application Class	Class A
Safety Rate	Class II (IEC)
Fire Rate	Class C (TUV)

### PACKING CONFIGURATION

Package Weight & Size	360 Kg/Pallet & 1200*1120*1060mm		
20'GP Container	62 Pcs/Box	18 Boxes/20'GP	1116 Pcs
40'HQ Container	62 Pcs/Box	40 Boxes/40'HQ	2480 Pcs

### DIMENSIONS OF PV MODULE

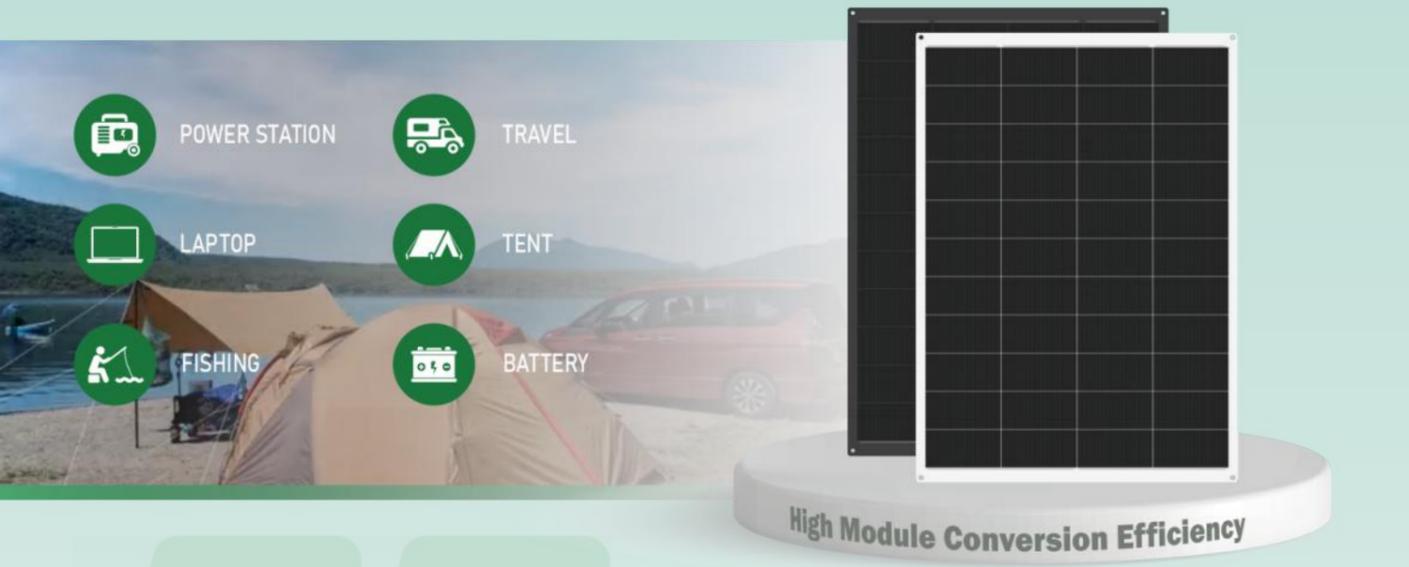
Module Dimensions	900(±3)×1140(±3)×3mm
Module Weight	3.6kg(±3%)

### TEMPERATURE CHARACTERISTICS & OPERATING CONDITIONS

Temperature Coefficient (Pmax)	δ [%/°C]	-0.30
Temperature Coefficient (Voc)	β [%/°C]	-0.25
Temperature Coefficient (Is)	α [%/°C]	+0.045
Nominal Operating Cell Temperature	NMOT	44°C ± 2°C
Operating Temperature	(°C)	-20 ~ +65
Max. Series Fuse Rating	(A)	15
Max. System Voltage (DC)	(V)	1500 (IEC)

### CONFIGURATION

Backsheet Color	White	Black
Cable Length	450mm	Customization
Connectors	Compatible MC4	Original EVO2



**220W / 225W / 235W / 240W**



## N-HJT Mono-crystalline Flexible PV Module

- High-Efficiency N-Type HJT Cells
- Ultra-Low Temperature Coefficient
- Excellent Low-Light Performance
- Lightweight & Ultra-Flexible Design
- Enhanced Durability & Weather Resistance
- Lower Annual Degradation
- Easy Installation & Wide Applicability
- Eco-Friendly & Lead-Free



### ELECTRICAL CHARACTERISTICS

Electrical Specifications		RFMG12NH4-220(FB)	RFMG12NH4-225(FB)	RFMG12NH4-235(W)	RFMG12NH4-240(W)
Module Type					
Peak Power(Pmax)±3%	W	220	225	235	240
Power Tolerance	W	0~+5	0~+5	0~+5	0~+5
Max.Power Voltage (Vmp)	V	24.14	24.30	24.46	24.62
Max.Power Current (Imp)	A	9.11	9.26	9.61	9.75
Open-circuit Voltage(Voc)±3%	V	28.83	29.01	29.37	29.55
Short-circuit Current(Isc)+3%	A	9.60	9.82	10.06	10.22
Module Efficiency	%	19.6	20.1	21.0	21.4
STC: AM1.5, Temperature 25°C, Irradiance 1000 W/m²					

### MECHANICAL SPECIFICATIONS

Solar Cells	N-Mono-210*105mm
Arrangement	Type-4*11
Front Sheet	ETFE composite membrane
Back Sheet	PET composite membrane
Junction Box	IP67, 2 diodes
Cables	2.5mm² photovoltaic cables
Connectors	MC4 compatible/IP67
Application Class	Class A
Safety Rate	Class II (IEC)
Fire Rate	Class C (TUV)

### PACKING CONFIGURATION

Package Weight & Size	380 Kg/Pallet & 1300*1120*1060mm		
20'GP Container	62 Pcs/Box	16 Boxes/20'GP	992 Pcs
40'HQ Container	62 Pcs/Box	36 Boxes/40'HQ	2232 Pcs

### DIMENSIONS OF PV MODULE

Module Dimensions	900(±3)×1245(±3)×3mm
Module Weight	4.0kg(±3%)

### TEMPERATURE CHARACTERISTICS & OPERATING CONDITIONS

Temperature Coefficient (Pmax)	δ [%/°C]	-0.30
Temperature Coefficient (Voc)	β [%/°C]	-0.25
Temperature Coefficient (Isc)	α [%/°C]	+0.045
Nominal Operating Cell Temperature	NMOT	44°C ± 2°C
Operating Temperature	(°C)	-20 ~ +65
Max. Series Fuse Rating	(A)	15
Max. System Voltage (DC)	(V)	1500 (IEC)

### CONFIGURATION

Backsheet Color	White	Black
Cable Length	450mm	Customization
Connectors	Compatible MC4	Original EVO2



**240W / 250W / 255W / 260W**



## N-HJT Mono-crystalline Flexible PV Module

- High-Efficiency N-Type HJT Cells
- Ultra-Low Temperature Coefficient
- Excellent Low-Light Performance
- Lightweight & Ultra-Flexible Design
- Enhanced Durability & Weather Resistance
- Lower Annual Degradation
- Easy Installation & Wide Applicability
- Eco-Friendly & Lead-Free



### ELECTRICAL CHARACTERISTICS

Electrical Specifications		RFMG12NH4-240(FB)	RFMG12NH4-250(FB)	RFMG12NH4-255(W)	RFMG12NH4-260(W)
Module Type					
Peak Power(Pmax)±3%	W	240	250	255	260
Power Tolerance	W	0~+5	0~+5	0~+5	0~+5
Max.Power Voltage (Vmp)	V	30.50	30.66	30.82	30.98
Max.Power Current (Imp)	A	7.87	8.15	8.27	8.39
Open-circuit Voltage(Voc)±3%	V	33.38	33.56	34.38	34.56
Short-circuit Current(Isc)+3%	A	9.04	9.37	9.33	9.46
Module Efficiency	%	19.9	20.4	20.9	21.4
STC: AM1.5, Temperature 25°C, Irradiance 1000 W/m²					

### MECHANICAL SPECIFICATIONS

Solar Cells	N-Mono-210*105mm
Arrangement	Type-4*12
Front Sheet	ETFE composite membrane
Back Sheet	PET composite membrane
Junction Box	IP67, 2 diodes
Cables	2.5mm² photovoltaic cables
Connectors	MC4 compatible/IP67
Application Class	Class A
Safety Rate	Class II (IEC)
Fire Rate	Class C (TUV)

### PACKING CONFIGURATION

Package Weight & Size	4.40 Kg/Pallet & 1400*1120*1060mm		
20'GP Container	62 Pcs/Box	16 Boxes/20'GP	992 Pcs
40'HQ Container	62 Pcs/Box	32 Boxes/40'HQ	1984 Pcs

### DIMENSIONS OF PV MODULE

Module Dimensions	1350(±3)×900(±3)×3mm
Module Weight	4.5kg(±3%)

### TEMPERATURE CHARACTERISTICS & OPERATING CONDITIONS

Temperature Coefficient (Pmax)	δ [%/°C]	-0.30
Temperature Coefficient (Voc)	β [%/°C]	-0.25
Temperature Coefficient (Isc)	α [%/°C]	+0.045
Nominal Operating Cell Temperature	NMOT	44°C ± 2°C
Operating Temperature	(°C)	-20 ~ +65
Max. Series Fuse Rating	(A)	15
Max. System Voltage (DC)	(V)	1500 (IEC)

### CONFIGURATION

Backsheet Color	White	Black
Cable Length	450mm	Customization
Connectors	Compatible MC4	Original EVO2