

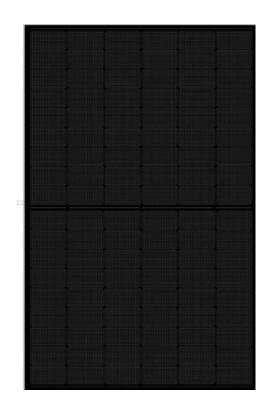
### N type Monocrystalline 420-440 Watt

0~+3% POWER TOLERANCE

High efficiency N - type Double glass black grid solar module

#### **Cell Busbar**





#### Module characteristics



#### Stronger properties

Passes the wind load test of 2400Mpa and the snow load test of 5400Mpa



#### Better attenuation

N-type, Components have better reliability and lower LID/LETID attenuation



#### PID resistance

The attenuation probability of PID phenomenon is minimized through battery production technology optimization and material control



#### Harsh environmental adaptation

Third party certification passed high salt spray and high ammonia corrosion test



#### Multiple grid and Half cell technique

More light utilization and current collection capabilities, effectively improving product power output and reliability





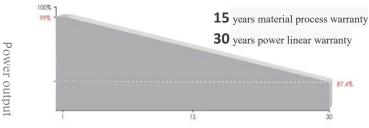


#### Long and reliable quality assurance

IEC61215 (2016), IEC61730 (2016) ISO9001:2015: Quality management system

ISO14001:2015: Environmental management system

IS045001:2018: Occupational health and safety management system



Linear decay of 0.4% per year over 30 years

<b>Electrical Parameters</b>										
Model Type	QN-420HD-1		QN-425HD-1		QN-430HD-1		QN-435HD-1		QN-440HD-1	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax)	420	318	425	322	430	326	435	330	440	334
Open Circuit Voltage (Voc)	38. 76	36.2	39. 04	36. 4	39. 53	36.6	40.02	36.8	38. 7	37
Short Circuit Current (Isc)	13.54	11.27	13. 56	11.33	13.57	11.38	13.58	11.43	14.32	11. 18
Maximum Power Voltage (Vmp)	32.3	30.0	32.6	30.2	32. 9	30.3	33. 1	30. 5	32.8	30.7
Maximum Power Current (Imp)	13.02	10.62	13.06	13.20	13.09	10.74	13. 13	10.82	13.42	10.88
Module Efficiency - η <sub>m</sub> (%)	21.0		21. 3		21.5		21.8		22.0	
Operational Temperature	-40°C^+85°C									
Maximum System Voltage	1500VDC									
Maximum Series Fuse Rating	25A									
Power Tolerance	0~+3%									
Temperature Coefficient of Pmax	−0. 310%/°C									
Temperature Coefficient of Voc	−0 <b>.</b> 260%/°C									
Temperature Coefficient of Isc	+0.046%/℃									
Nominal Operating Cell Temperature	45±2℃									
Safety Class	Class II									
Max Load (Front/back)	5400Mpa/2400Mpa									

STC: Irradiance 1000W/m² NOCT:Irradiance 800W/m²

Cross section of frame

Atmospheric quality =1.5  $\,$ 

Curve figure

Frame

Junction Box

Atmospheric quality =1.5 Wind speed 1m/S

# Mechanical Diagrams Front Side Back Length: ± 2mm Width:± 2mm Thickness:± 1mm Hole pitch:± 2mm

## Specification Cell type N type mono crystalline 16BB Half-cell quantity 108 (6×18) pcs Dimension 1762×1134×30mm Weight 25.3kg±3% Front glass 2.0 mm Tempered Glass Back glass 2.0mm, float, transparent/grid optional

Black Anodized Aluminum Alloy

IP68

#### Packing standard

36pcs/pallet, Each pallet size: 1792×1130×1245mm 40HQ:26 pallets/container, 936pcs/container

Cable 300mm (can be customized)

The company reserves the right of final interpretation