

N type Mono-crystalline

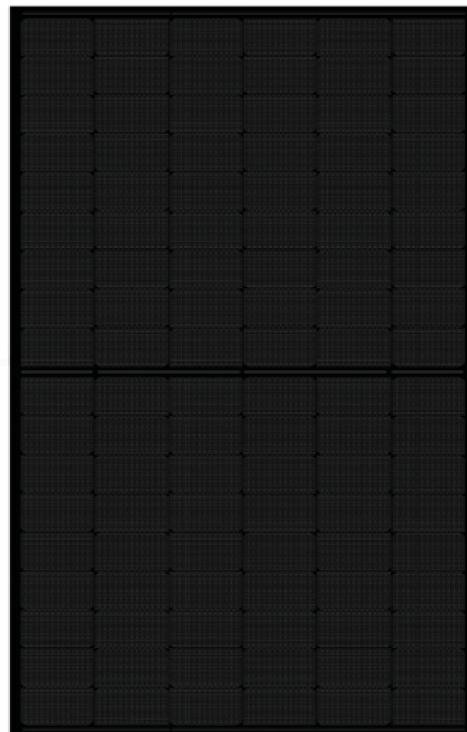
400-420 Watt

0~+3% POWER TOLERANCE

High efficiency N - type Double glass black solar module

Battery grid line

16BB



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



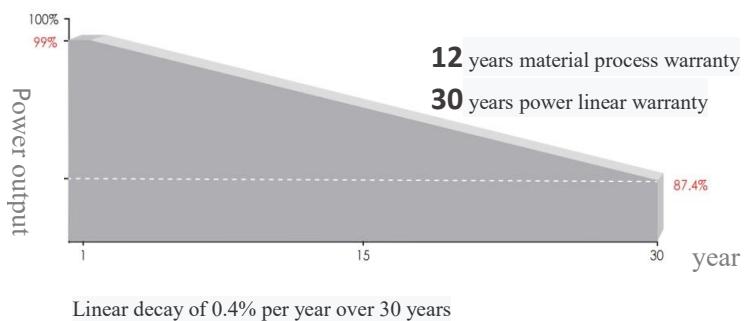
Long and reliable quality assurance

IEC61215 (2016), IEC61730 (2016)

ISO9001:2015: Quality management system

ISO14001:2015: Environmental management system

ISO45001:2018: Occupational health and safety management system



Electrical Parameters

Model Type	QN-DG400HN		QN-DG405HN		QN-DG410HN		QN-DG415HN		QN-DG420HN									
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT								
Maximum Power (Pmax)	400	302.3	405	306.0	410	309.6	415	315	420	318								
Open Circuit Voltage (Voc)	37.1	34.8	37.3	35.0	37.5	35.2	37.7	36.0	37.9	36.2								
Short Circuit Current (Isc)	13.73	11.04	13.81	11.10	13.88	11.16	13.96	11.22	14.04	11.27								
MaximumPowerVoltage(Vmp)	31.2	28.8	31.4	29.0	31.6	29.2	31.8	29.8	32.0	30.0								
MaximumPowerCurrent (Imp)	12.83	10.50	12.90	10.56	12.98	10.62	13.06	10.56	13.13	10.62								
ModuleEfficiency - η_m (%)	20.5		20.7		21.0		21.3		21.5									
Operational Temperature	$-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$																	
Maximum System Voltage	1500VDC																	
Maximum Series Fuse Rating	25A																	
Power Tolerance	$0\sim+3\%$																	
Temperature Coefficient of Pmax	$-0.310\%/\text{ }^{\circ}\text{C}$																	
Temperature Coefficient of Voc	$-0.260\%/\text{ }^{\circ}\text{C}$																	
Temperature Coefficient of Isc	$+0.046\%/\text{ }^{\circ}\text{C}$																	
Nominal Operating Cell Temperature	$45\pm 2\text{ }^{\circ}\text{C}$																	
Safety Class	Class II																	
Max Load (Front/back)	5400Mpa/2400Mpa																	

STC: Irradiance 1000W/m²

Battery temperature 25°C

Atmospheric quality =1.5

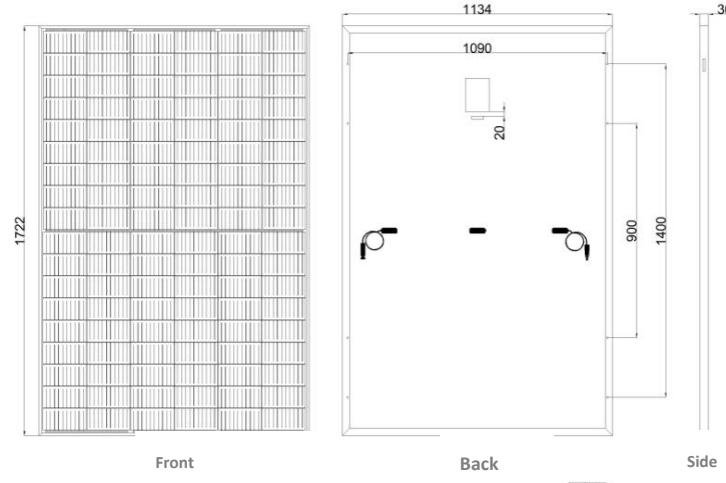
NOCT: Irradiance 800W/m²

Ambient emperature 25°C

Atmospheric quality =1.5

Wind speed 1m/S

Mechanical Diagrams

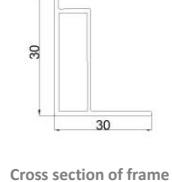


Length: $\pm 2\text{mm}$

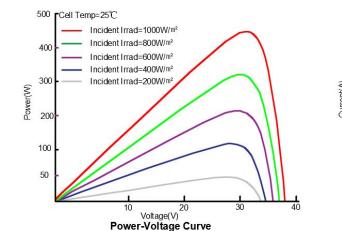
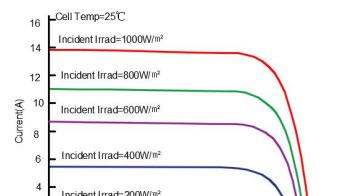
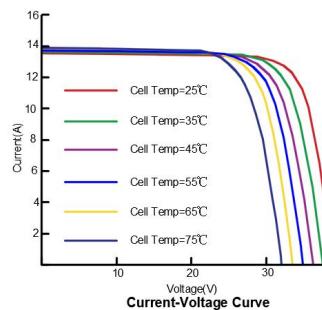
Width: $\pm 2\text{mm}$

Thickness: $\pm 1\text{mm}$

Hole pitch: $\pm 2\text{mm}$



Curve figure



Specification

Cell type N type mono crystalline 16BB

Half-cell quantity 108 (6x18)

Dimension 1722x1134x30

Weight 25.3kg $\pm 3\%$

Glass Front 2.0/Back 2.0mm Coated toughened

Frame Black Anodized Aluminum Alloy

Junction Box IP68

Cable 300mm (can be customized)

Packing standard

35pcs/pallet, Each pallet size: 1760x1130x1245mm

40GP: 26 pallets/container, 910pcs/container