

GIWA 5

Bifacial HJT Solar Module (Half-cut)

405-425W



2x **40**
CELLS



Higher Power Output

The output power is as high as 425W
Bifaciality is up to 90%
Provide up to 25% extra power from rear side



Less Power Loss

Unique half-cut cell technology reduces power loss
Anti-PID & LID



Ideal Choice for Rooftop Solution

Higher PV system power generation
Better low light performance



Enhanced Safety Level

IP68 water resistance
Long-term weather endurance

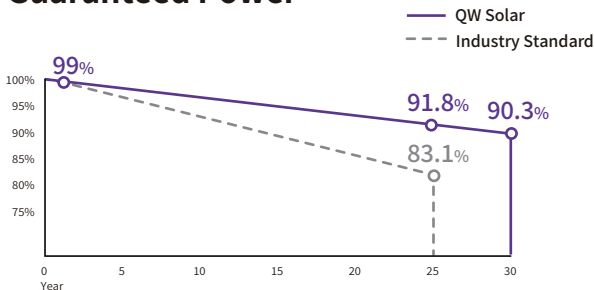


5.0%

Excellent Linear Power Warranty

Average annual degradation below 0.3% from 2nd year to 30th year.
At least 5% higher power output than P-type module after 25 years.

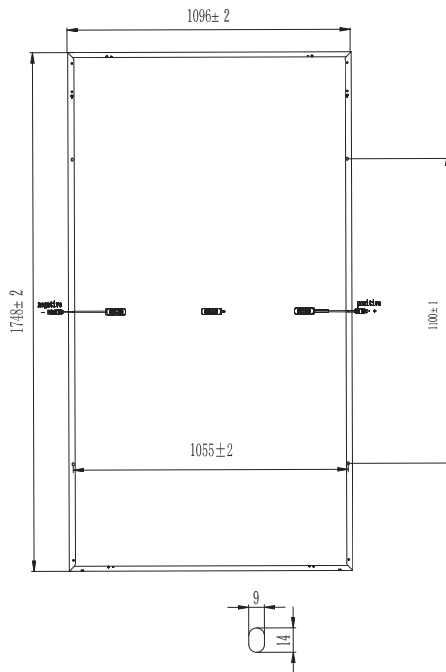
Guaranteed Power



25 years Product Warranty | **30 years** Linear Performance Warranty



TECHNICAL DRAWINGS



ELECTRICAL CHARACTERISTICS

Model/QWBDN80-	405W	410W	415W	420W	425W
Testing Condition: STC Maximum Power (Pmax/W)	405	410	415	420	425
Operating Voltage (Vmp/V)	25.22	25.49	25.75	26.01	26.27
Operating Current (Imp/A)	16.06	16.09	16.12	16.15	16.18
Open-Circuit Voltage (Voc/V)	29.76	29.96	30.15	30.30	30.50
Short-Circuit Current (Isc/A)	17.05	17.10	17.15	17.20	17.25
Module Efficiency (%)	21.14	21.40	21.66	21.92	22.18

STC: Irradiance 1000W/m², Spectra at AM1.5, Cell Temperature 25°C.
Power Output Tolerance: 0~+5W, Test Uncertainty for Pmax: ±3%

REAR SIDE POWER GAIN(REFERENCE TO 415W FRONT)

Pmax Gain	5%	10%	15%	20%	25%
Pmax/W	435.75	456.5	477.25	498	518.75
Vmp/V	25.76	25.77	25.77	25.79	25.79
Imp/A	16.92	18.06	18.52	19.31	20.11
Voc/V	30.15	30.15	30.16	30.16	30.18
Isc/A	17.74	18.68	19.32	20.05	20.63

MECHANICAL CHARACTERISTICS

Solar Cell	HJT 210 x 105mm
No. of Cells	80 (2 x 40)
Module Dimensions	1748 x 1096 x 30mm (68.82 x 43.15 x 1.18 inches)
Weight	23kg
Front Glass	2.0mm AR Coating Semi-tempered Glass
Back Glass	2.0mm Heat Strengthened Glass
Frame	Anodized Aluminium Alloy (Black)
Junction Box	IP68, 3 Bypass Diodes
Output Cables	4mm ² , 300mm(+)/300mm(-) or Customized Length
Connectors	MC4

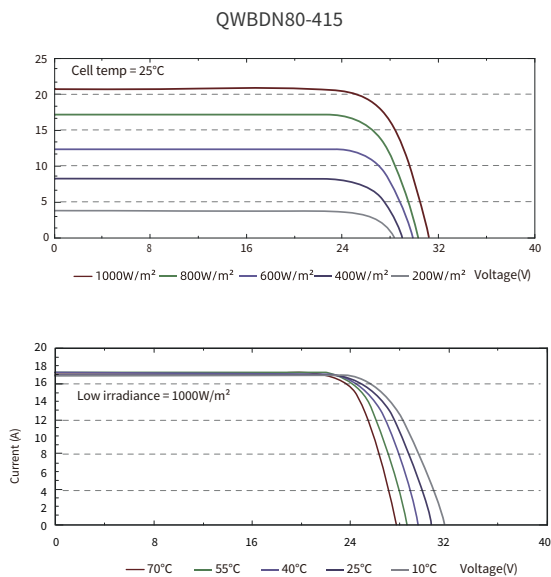
APPLICATION CONDITIONS

Maximun System Voltage	DC1500V
Operating Temperature	-40°C~+85°C
Maximun Series Fuse	30A
Safety Protection Class	Class II
Mechanical Load	Front side 5400Pa, Back side 2400Pa
Refer. Bifaciality Factor	85%±5%

TEMPERATURE CHARACTERISTICS

Temperature Coefficient of Pmax	-0.26%/°C
Temperature Coefficient of Voc	-0.22%/°C
Temperature Coefficient of Isc	+0.047%/°C
Nominal Module Operating Temperature (NOCT)	42±2°C

I-V CURVE



PACKING CONFIGURATION

Type of Shipping	Platform Trailer (17.5m)	Container 40'HC
Pieces/Pallet	36	36
Total Amount	1296	936