

650W-670W

G12R QUARTER-CUT DUAL-GLASS

Maximum
Power Output

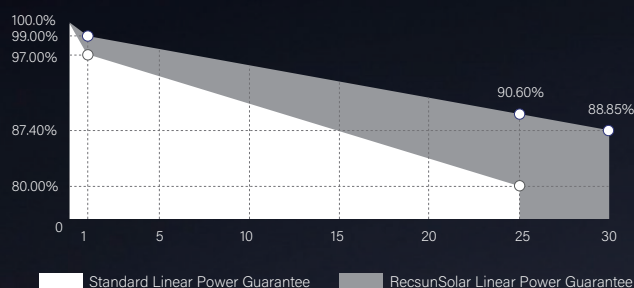
670W

Maximum
Module Efficiency

24.80%

Power Output
Tolerance

0-+5W



KEY FEATURES



Lower Power Loss & Higher Efficiency

Reduces power loss by 8%-15% for higher power generation efficiency under all light conditions.



Excellent Shade Tolerance

Achieves 30% higher shade tolerance than ordinary modules and prevents overall module shutdown.



Reduced Hot Spot Risks

Suppresses hot spots and attenuation, guaranteeing 25+ years of stable low-failure operation.



Enhanced Mechanical Stability

Prevents cell cracks, strengthens wind and snow resistance for durable outdoor use.



Better Low Irradiance Performance

Higher power output even under low irradiance environments like on cloudy or foggy days



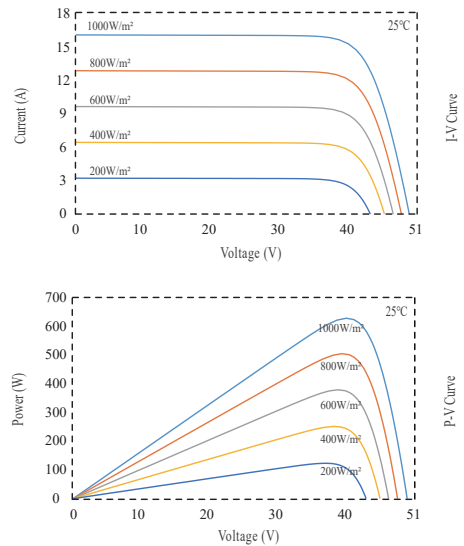
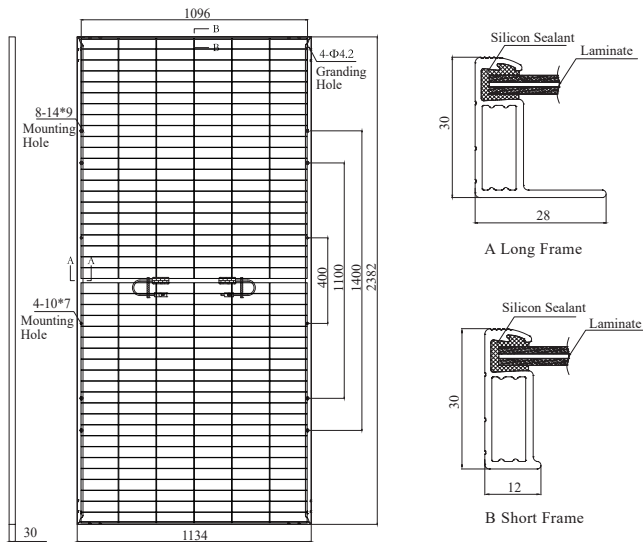
Optimized Long-Term Economic Benefits

Low attenuation and maintenance reduce LCOE, delivering superior long-term economic returns.

Leading Product and Power Warranty

-1.00%1st-Year Degradation -0.35%Annual Degradation 15Workmanship Warranty 30Linear Power Warranty

1/4 CUT
TECHNOLOGY



ELECTRICAL PARAMETERS (Test Condition is Based on the Front Side)

Module Type	N650Q264G12RD		N655Q264G12RD		N660Q264G12RD		N665Q264G12RD		N670Q264G12RD	
Testing Condition	STC	BNPI	STC	BNPI	STC	BNPI	STC	BNPI	STC	BNPI
Nominal Max. Power(Pmax/W)	650	724	655	729	660	735	665	741	670	746
Open Circuit Voltage(Voc/V)	50.26	50.38	50.44	50.56	50.62	50.74	50.80	50.92	50.98	51.10
Short Circuit Current(Isc/A)	15.98	17.80	16.04	17.87	16.10	17.94	16.16	18.00	16.22	18.07
Maximum Power Voltage(Vmp/V)	42.57	42.52	42.70	42.69	42.83	42.86	42.96	43.03	43.09	43.20
Maximum Power Current(Imp/A)	15.27	17.04	15.34	17.10	15.41	17.17	15.48	17.23	15.55	17.30
Efficiency(%)	24.06%		24.25%		24.43%		24.62%		24.80%	

STC: Irradiance = 1000 W/m², Cell Temperature = 25°C, AM = 1.5, Average Efficiency Reduction of 4.5% at 200W/m².

BNPI: Front Irradiance = 1000 W/m², Rear Irradiance = 135 W/m², Ambient Temperature = 25°C, AM = 1.5, Wind Speed = 1 m/s.

MECHANICAL PARAMETERS

Cell Type	182*210mm, 264QC	Connector	MC4 Original/Compatible
Module Size&Weight	2382*1134*30mm, 32.5Kg	Junction Box	IP68, 3 Bypass Diodes
Glass	2.0mm AR Coated Heat Strengthened Glass	Frame	Anodized Aluminium Alloy(Silver)
Backsheet	2.0mm Ultra-Clear Float Glass	Cable	4mm², Cable Length 1400mm(customized)

TEMPERATURE COEFFICIENTS

Nominal Operating Cell Temperature	45°C(±2°C)	Temperature Coefficient of Voc	-0.250%/°C
Temperature Coefficient of Pmax	-0.290%/°C	Temperature Coefficient of Isc	+0.046%/°C

REAR SIDE POWER GAIN 10% FOR REFERENCE

Front Side Power(W)	650	655	660	665	670
Nominal Max. Power(Pmax/W)	715	720.5	726	731.5	737
Open Circuit Voltage(Voc/V)	50.26	50.44	50.62	50.80	50.98
Short Circuit Current(Isc/A)	17.74	17.82	17.91	17.99	18.07
Max. Power Voltage(Vmp/V)	42.57	42.70	42.83	42.96	43.09
Max. Power Current(Imp/A)	16.80	16.87	16.95	17.03	17.10

OPERATING PARAMETERS

Max. System Voltage	DC1500V
Power Tolerance	0 - +5W
Operating Temperature	-40°C - +85°C
Max. Fuse Rated Current	30A
Front Static Load	Snow 5400Pa, Wind 2400Pa
Packaging Data	37PCS/Pallet; 740PCS/40HQ