

G10R_{BI}-78P

N-type Bifacial Double Glass Module

HSM-BD78-GF655~685

685W

Maximum Power Output

24.5%

Maximum Efficiency



Higher energy density;
lower operating temperature



Lower hotspot temperature;
reduce risk of micro-cracks



Refined design,
Busbar-free front side



Comprehensive supply chain integration,
redefining BC standards

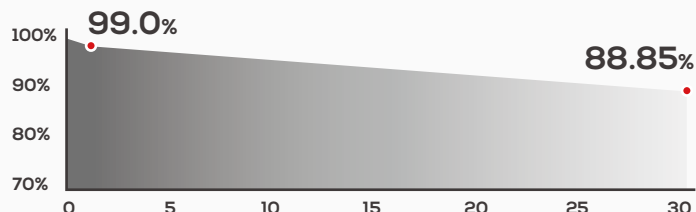
Linear Performance Warranty



15 Years
Product Warranty



30 Years Linear
Performance Warranty



Comprehensive Products and System Certificates



IEC 61215 / IEC 61730 ISO 9001:2015 ISO 45001:2018 ISO 14001:2015

Electrical Parameters (STC* & BNPI*)

* STC: Irradiance 1000W/m², Cell Temperature 25°C, AM1.5, Measuring Tolerance: ±3%
* BNPI: Front Irradiance 1000W/m², Back Irradiance 135W/m², Ambient Temperature 25°C, AM1.5, Measuring Tolerance: ±3%

Testing Condition		STC	BNPI	STC	BNPI	STC	BNPI	STC	BNPI	STC	BNPI	STC	BNPI
Maximum Power	P _{max} (W)	655	716	660	721	665	727	670	732	675	738	680	743
Open Circuit Voltage	V _{oc} (V)	58.46	58.62	58.57	58.72	58.68	58.85	58.79	58.94	58.90	59.07	59.01	59.16
Short Circuit Current	I _{sc} (A)	14.18	15.46	14.26	15.54	14.34	15.63	14.42	15.72	14.50	15.81	14.58	15.89
Maximum Power Voltage	V _{mp} (V)	49.04	49.05	49.19	49.19	49.34	49.36	49.49	49.50	49.64	49.67	49.79	49.80
Maximum Power Current	I _{mp} (A)	13.36	14.60	13.42	14.66	13.48	14.73	13.54	14.79	13.60	14.86	13.66	14.92
Module Efficiency	(%)	23.4		23.6		23.8		24.0		24.1		24.3	

Electrical Characteristics with Different Bifacial Gain*

* The additional gain from the back side depends on mounting (structure, height, tilt angle etc.) and albedo of the ground.

Bifacial Gain		5%	10%	5%	10%	5%	10%	5%	10%	5%	10%	5%	10%
Maximum Power	P _{max} (W)	688	721	693	726	698	732	704	737	709	743	714	754
Open Circuit Voltage	V _{oc} (V)	58.46	58.46	58.57	58.57	58.68	58.68	58.79	58.79	58.90	58.90	59.01	59.01
Short Circuit Current	I _{sc} (A)	14.89	15.60	14.97	15.69	15.06	15.77	15.14	15.86	15.23	15.95	15.31	16.04
Maximum Power Voltage	V _{mp} (V)	49.04	49.04	49.19	49.19	49.34	49.34	49.49	49.49	49.64	49.64	49.79	49.79
Maximum Power Current	I _{mp} (A)	14.03	14.70	14.09	14.76	14.15	14.83	14.22	14.89	14.28	14.96	14.34	15.03

Temperature Coefficient

Nominal Module Operating Temperature*	43±2°C
Temperature Coefficient of I _{sc}	+0.05%/°C
Temperature Coefficient of V _{oc}	-0.22%/°C
Temperature Coefficient of P _{max}	-0.26%/°C

Operating Parameters

Operating Temperature	-40~+85°C
Maximum System Voltage	1500V DC
Maximum Series Fuse Rating	30A
Power Bifaciality	70±5%
Safety Protection Rating	Class II
Fire Rating	Class C

Mechanical Data

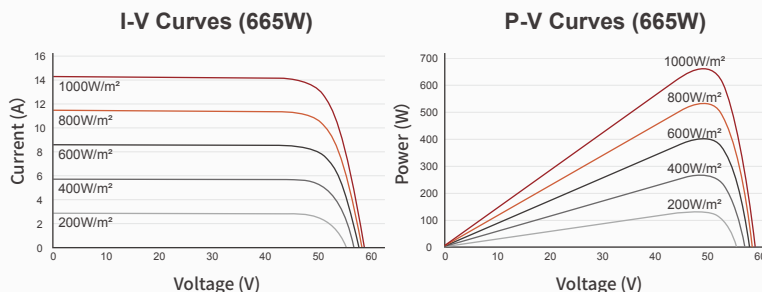
* Please refer to installation manual for details

No. of Cells	156pcs (6×26)
Dimension	2465×1134×30 mm
Weight	34.5kg ±3%
Front Glass	2.0mm, Heat Strengthened, AR coating Glass
Back Glass	2.0mm, Heat Strengthened Glass
Frame	Anodized Aluminium Alloy
J-Box	IP68, three diodes
Cables	4.0mm ² , +300mm, -200mm (can be customized)
Maximum Static Load	Front: 5400Pa/Back: 2400Pa*

Packaging Configuration

Modules per Pallet	36pcs
Modules per 40'HQ Container	576pcs
Pallets per 40'HQ Container	16pcs

Curve Graph



Engineering Drawing

[Unit: mm]

