

## G10L-72P N-type Bifacial Double Glass Module

HSM-ND72-GF580~605

### 605W

Maximum Power Output

### 23.4%

Maximum Efficiency



### Superior Customer Value

- Layout design for multiple scenarios
- Extensive project references for system design
- Optimized for diverse installation needs



### High Energy Yield

- Consistent high yield in varying conditions
- Enhanced thermal resistance and bifacial power generation



### Long-term Reliability

- Advanced weather-resistant encapsulation
- Aluminium alloy frame and heat strengthened glass
- Resistant to harsh environmental conditions

### Comprehensive Products and System Certificates



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

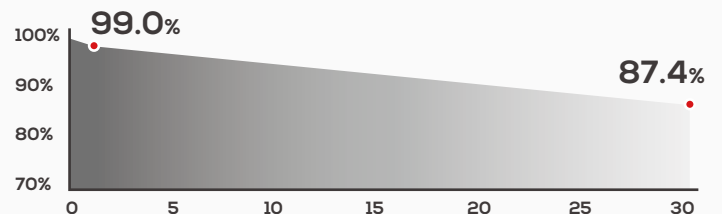
### Linear Performance Warranty



15 Years Product Warranty



30 Years Linear Performance Warranty



**Electrical Parameters (STC\* & BNPI\*)**

\* STC: Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, AM1.5, Measuring Tolerance: ±2%  
 \* BNPI: Back Irradiance 135W/m<sup>2</sup>, Cell temperature 25°C, Atmospheric quality AM 1.5G, Wind speed 1m/s

Testing Condition		STC	BNPI	STC	BNPI	STC	BNPI	STC	BNPI	STC	BNPI	STC	BNPI
Maximum Power	P <sub>max</sub> (W)	580	640	585	645	590	651	595	656	600	662	605	667
Open Circuit Voltage	V <sub>oc</sub> (V)	52.50	52.68	52.70	52.86	52.90	53.07	53.10	53.26	53.30	53.47	53.50	53.65
Short Circuit Current	I <sub>sc</sub> (A)	13.96	15.40	14.02	15.46	14.08	15.53	14.14	15.59	14.20	15.66	14.26	15.72
Maximum Power Voltage	V <sub>mp</sub> (V)	44.65	44.67	44.83	44.83	45.01	45.03	45.18	45.18	45.36	45.38	45.53	45.53
Maximum Power Current	I <sub>mp</sub> (A)	12.99	14.33	13.05	14.39	13.11	14.46	13.17	14.52	13.23	14.59	13.29	14.65
Module Efficiency	(%)	22.5		22.6		22.8		23.0		23.2		23.4	

**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 <sub>max</sub> (W)	609	638	614	644	620	649	625	655	630	660	635	666
Open Circuit Voltage	V <sub>oc</sub> (V)	52.50	52.50	52.70	52.70	52.90	52.90	53.10	53.10	53.30	53.30	53.50	53.50
Short Circuit Current	I <sub>sc</sub> (A)	14.66	15.36	14.72	15.42	14.78	15.49	14.85	15.55	14.91	15.62	14.97	15.69
Maximum Power Voltage	V <sub>mp</sub> (V)	44.65	44.65	44.83	44.83	45.01	45.01	45.18	45.18	45.36	45.36	45.53	45.53
Maximum Power Current	I <sub>mp</sub> (A)	13.64	14.29	13.70	14.36	13.77	14.42	13.83	14.49	13.89	14.55	13.95	14.62

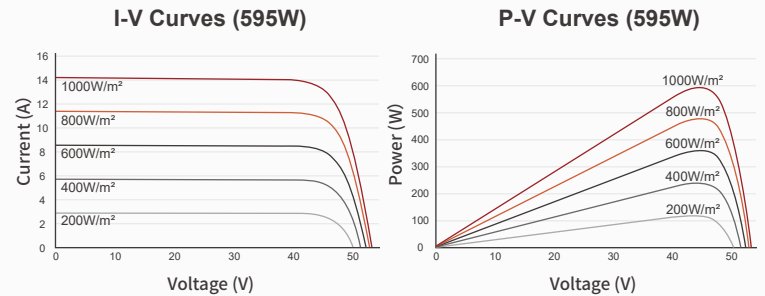
**Temperature Coefficient**

Nominal Module Operating Temperature*	43±2°C
Temperature Coefficient of I <sub>sc</sub>	+0.045%/°C
Temperature Coefficient of V <sub>oc</sub>	-0.24%/°C
Temperature Coefficient of P <sub>max</sub>	-0.28%/°C

**Operating Parameters**

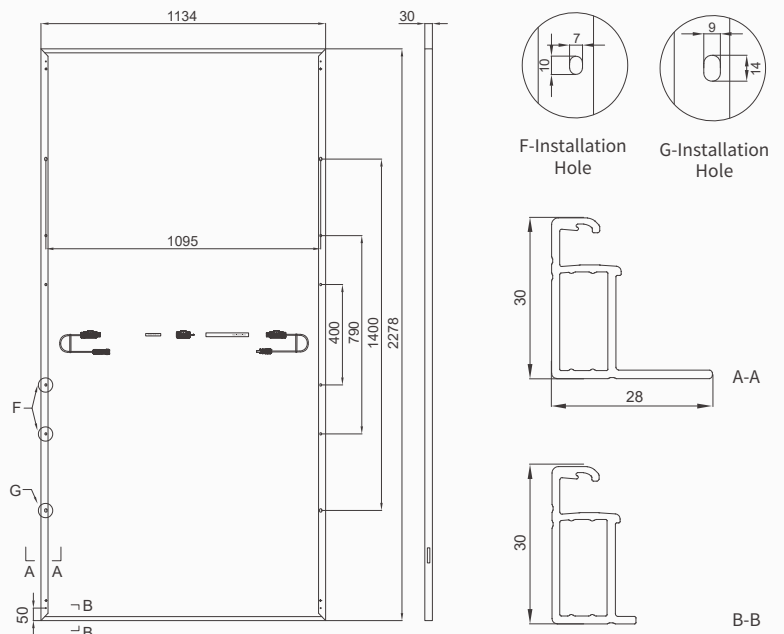
Operating Temperature	-40~+85°C
Maximum System Voltage	1500V DC
Maximum Series Fuse Rating	30A
Power Bifaciality	80±5%

**Curve Graph**



**Engineering Drawing**

[Unit: mm]



**Mechanical Data**

\* Please refer to installation manual for details

No. of Cells	144pcs (6×24)
Dimension	2278×1134×30mm
Weight	30.6kg±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 <sup>2</sup> , +300mm, -200mm (can be customized)
Maximum Static Load	Front: 5400Pa/Back: 2400Pa*
Fire Rating	IEC Class C

**Packaging Configuration**

Modules per Pallet	36pcs
Modules per 40'HQ Container	720pcs
Pallets per 40'HQ Container	20pcs