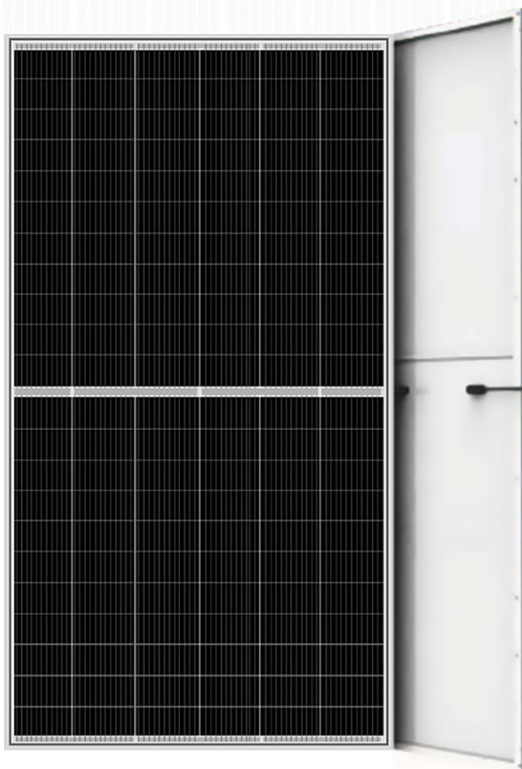




GreensunSolar



GSM-M12/132H 655-685W

High Efficiency
Mono Solar Panel
Half-Cut Technology

685W

Maximum Power
Output

22.1%

Maximum Module
Efficiency

0~+5W

Power Output
Guarantee



Ideal choice for Residential and C&I Installation



Special cutting and soldering technology leads to low hotspot risk



Optimized system performance due to module level current sorting



Selected encapsulating material and stringent production process control ensure the product is highly PID resistant and snail trails free



Sand blowing test, salt mist test and ammonia test passed to endure harsh environments

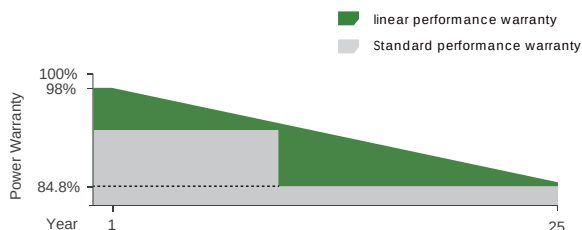


Highly transparent self-cleaning glass brings additional yield and easy maintenance

Delivers Reliable Performance Over Time

- manufacturer of crystalline silicon photovoltaic modules
- Fully automatic facility and world-class technology
- Rigorous quality control to meet the highest standard: ISO9001:2015, ISO14001: 2015 and OHSAS: 18001 2007
- Tested for harsh environments (salt mist, ammonia corrosion and sand blowing test: IEC 61701, IEC 62716, DIN EN 60068-2- 68)
- Long term reliability tests
- 2×100% EL inspection ensuring defect-free modules

Linear Performance Warranty



12 years product material and process warranty, 25 years linear power warranty

* Please refer to standard warranty for details



Greensun Solar Energy Tech Co., Limited
Web: www.greensunpv.com
Tel: +86 187 1510 8506 Email: manager@greensunpv.com

Electrical Specification (STC*)

Maximum Power	P _{max} (W)	655	660	665	670	675	680	685
Maximum Power Voltage	V _{mp} (V)	37.60	37.80	38.00	38.20	38.40	38.60	38.80
Maximum Power Current	I _{mp} (A)	17.40	17.44	17.49	17.54	17.58	17.62	17.66
Open Circuit Voltage	V _{oc} (V)	41.40	41.60	41.80	42.00	42.20	42.40	42.60
Short Circuit Current	I _{sc} (A)	18.47	18.52	18.57	18.62	18.67	18.72	18.74
Module Efficiency	(%)	21.0	21.2	21.4	21.5	21.7	21.9	22.1
Power Output Tolerance	(W)	0~+5						

* Irradiance 1000W/m², Module Temperature 25°C, Air Mass 1.5

Electrical Specification (NOCT*)

Maximum Power	P _{max} (W)	496	500	504	509	513	517	520
Maximum Power Voltage	V _{mp} (V)	35.10	35.30	35.50	35.70	35.90	36.10	36.30
Maximum Power Current	I _{mp} (A)	14.13	14.18	14.22	14.27	14.31	14.35	14.39
Open Circuit Voltage	V _{oc} (V)	42.8	43.0	43.2	43.4	43.6	43.8	44.0
Short Circuit Current	I _{sc} (A)	14.83	14.92	14.96	15.00	15.04	15.08	15.12

* Irradiance 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s

Mechanical Data

Number of Cells	132 Cells (6×22)
Dimensions of Module L*W*H (mm)	2385×1303×35mm (93.85×51.29×1.38 inches)
Weight (kg)	35.7 kg
Glass	High transparency solar glass 3.2mm(0.13 inches)
Backsheet	White
Frame	Silver, anodized aluminium alloy
J-Box	IP68 Rated
Cable	4.0mm ² [0.006 inches ²], 300mm [11.8 inches]
Number of diodes	3
Wind/ Snow Load	2400Pa/ 5400Pa*
Connector	MC Compatible

* For more details please check the installation manual

Temperature Ratings

Nominal Operating Cell Temperature [NOCT]	43±2°C
Temperature Coefficient of I _{sc}	+0.040%/°C
Temperature Coefficient of V _{oc}	-0.250%/°C
Temperature Coefficient of P _{max}	-0.340%/°C

Maximum Ratings

Operational Temperature	-40~+85°C
Maximum System Voltage	1500V DC
Max Series Fuse Rating	25A

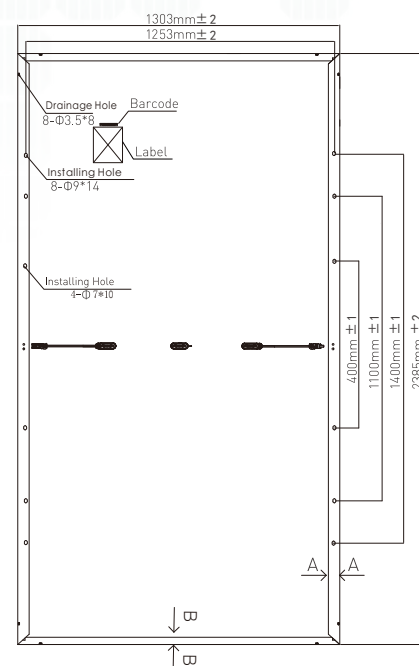
Packaging Configuration

Module per box	31 pieces
Module per 40' container	558 pieces

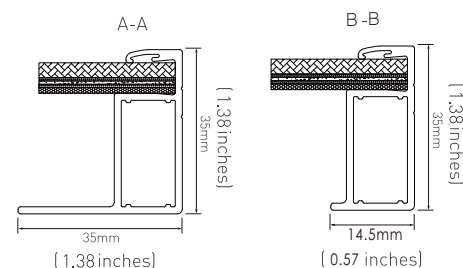
Optional

Connector	☒ MC Original
-----------	---

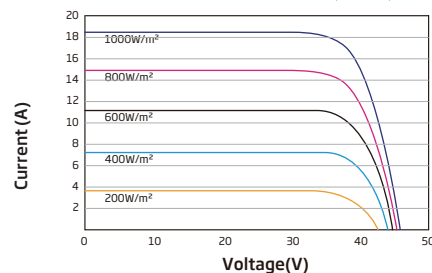
Module Dimension



Back View



I-V CURVES OF PV MODULE(670W)



P-V CURVES OF PV MODULE(670W)

