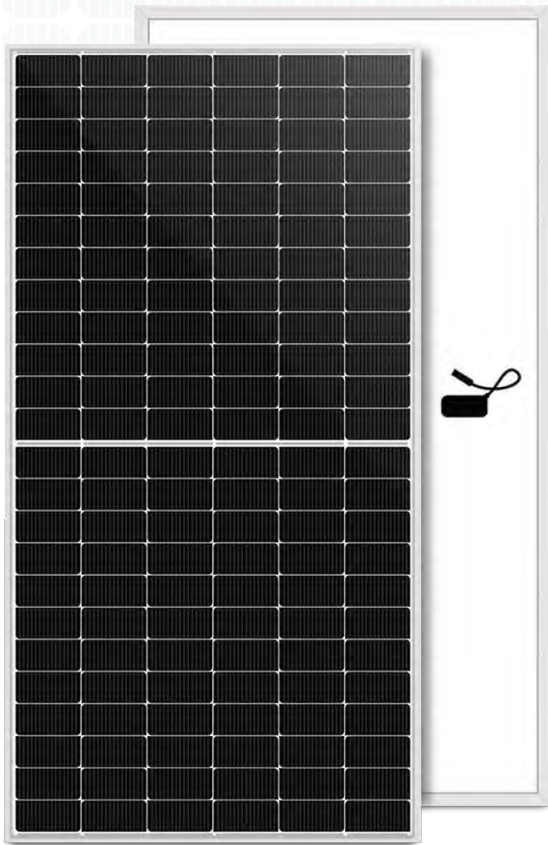




GreensunSolar



N-Type

GSM-M10/144H
570-590W

N-Type TOPCON

High Efficiency
Mono Solar Panel
Half-Cut Technology

590W

Maximum Power
Output

22.84%

Maximum Module
Efficiency

0~+5W

Power Output
Guarantee



N-type Topcon technology for lower LCOE

The lower temperature coefficient and better low irradiance performance of Topcon technology can effectively reduce LCOE.



Ultra-low Degradation, longer warranty, higher output

- First-year degradation 1% and annual degradation at 0.4%
- Up to 25 years product warranty and 30 years power warranty



PID Resistance

Excellent Anti-PID performance guarantee via optimized mass-production process and materials control.



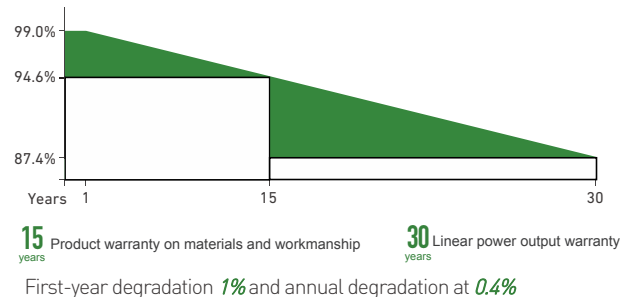
Universal solution for residential and C&I application

- Easy for integration, designed for compatibility with existing mainstream inverters and diverse mounting systems
- Perfect size and low weight for handling and installation
- Most valuable solution on low load capacity rooftops (weight similar to backsheet version)
- Mechanical performance up to 5400 Pa positive load and 4000 Pa negative load

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
- 2x100% EL inspection ensuring defect-free modules

Linear Performance Warranty



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)	570	575	580	585	590
Maximum Power Voltage	V _{mp} (V)	42.07	42.22	42.37	42.52	42.67
Maximum Power Current	I _{mp} (A)	13.55	13.62	13.69	13.76	13.83
Open Circuit Voltage	V _{oc} (V)	50.74	50.88	51.02	51.16	51.30
Short Circuit Current	I _{sc} (A)	14.31	14.39	14.47	14.55	14.63
Module Efficiency	(%)	22.06	22.25	22.44	22.64	22.84
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)	429	432	436	440	444
Maximum Power Voltage	V _{mp} (V)	39.51	39.60	39.69	39.81	39.92
Maximum Power Current	I _{mp} (A)	10.85	10.92	10.99	11.05	11.12
Open Circuit Voltage	V _{oc} (V)	48.20	48.33	48.46	48.60	48.73
Short Circuit Current	I _{sc} (A)	11.55	11.62	11.68	11.75	11.82

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

Mechanical Data

Number of Cells	144 Cells(6×24)
Dimensions of Module L*W*H (mm)	2278×1134×30mm
Weight (kg)	29.4 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	4000Pa/ 5400Pa*
Connector	MC Compatible

* For more details please check the installation manual

Temperature Ratings

Nominal Operating Cell Temperature [NOCT]	45±2°C
Temperature Coefficient of I _{sc}	+0.040%/°C
Temperature Coefficient of V _{oc}	-0.240%/°C
Temperature Coefficient of P _{max}	-0.300%/°C

Packaging Configuration

Module per box	36 pieces
Module per 40' container	720 pieces

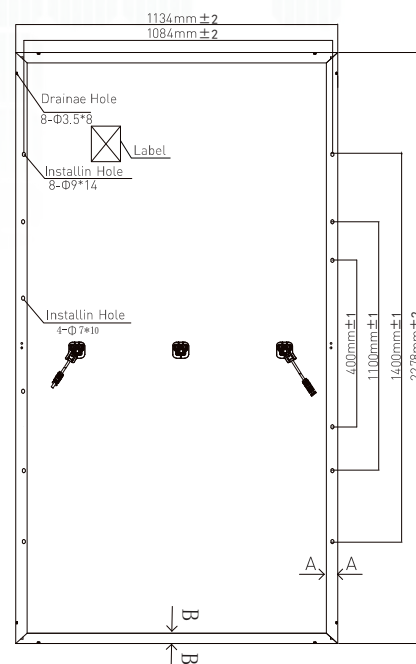
Maximum Ratings

Operational Temperature	-40~+85°C
Maximum System Voltage	1500V DC
Max Series Fuse Rating	20A

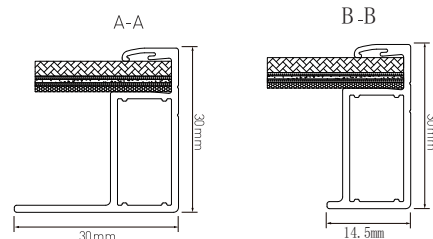
Optional

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

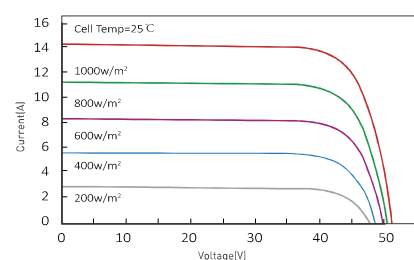
Module Dimension



Back View



I-V Curve at Different Temperature (570W)



I-V/P-V Curve at Different Irradiation (570W)

