



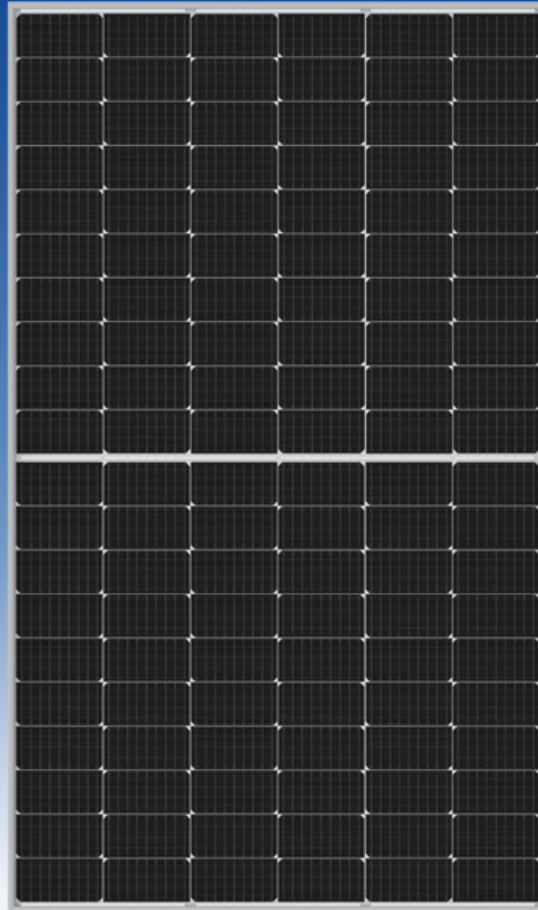
GSM-M10/120H 440-470W

High Efficiency
Mono Solar Panel
Half-Cut Technology

Cell Type



10BB(182mm)



470W
Maximum Power
Output

21.6%
Maximum Module
Efficiency

0~+5W
Power Output
Guarantee



Universal solution for
residential and C&I rooftops
Designed for compatibility with
existing mainstream optimizers,
inverters and mounting systems



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



Special cutting and soldering
technology leads to low
hotspot risk



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



Optimized system
performance due to module
level current sorting

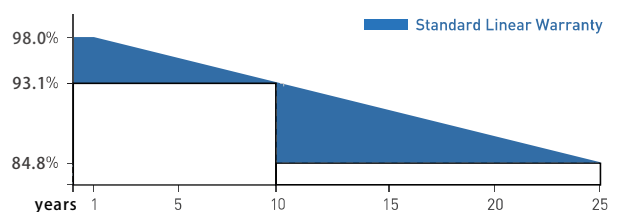


Highly transparent
self-cleaning glass brings
additional yield and easy
maintenance

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
- 2x100% EL inspection ensuring defect-free modules

Linear Performance Warranty



12 Years Product Warranty 25 Years Linear Power Warranty

Please refer to standard warranty for details

Product certification





Electrical Specification (STC*)

Maximum Power	P _{max} (W)	440	445	450	455	460	465	470
Maximum Power Voltage	V _{mp} (V)	34.21	34.26	34.31	34.36	34.41	34.45	34.50
Maximum Power Current	I _{mp} (A)	12.87	12.99	13.12	13.25	13.38	13.51	13.64
Open Circuit Voltage	V _{oc} (V)	41.44	41.50	41.56	41.62	41.68	41.74	41.80
Short Circuit Current	I _{sc} (A)	13.55	13.67	13.81	13.95	14.09	14.23	14.37
Module Efficiency	(%)	20.4	20.6	20.8	21.0	21.2	21.4	21.6
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)	327	331	335	339	343	347	351
Maximum Power Voltage	V _{mp} (V)	31.83	31.87	31.92	31.97	32.02	32.07	32.12
Maximum Power Current	I _{mp} (A)	10.29	10.39	10.49	10.60	10.71	10.82	10.93
Open Circuit Voltage	V _{oc} (V)	39.12	39.17	39.23	39.29	39.35	39.41	39.47
Short Circuit Current	I _{sc} (A)	10.94	11.04	11.15	11.26	11.37	11.48	11.59

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

Mechanical Data

Number of Cells	120 Cells (6×20)
Dimensions of Module L*W*H (mm)	1908×1134×35mm [75.11×44.64×1.38 inches]
Weight (kg)	24.0 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)	44±2°C
Temperature Coefficient of I _{sc}	+0.048%/°C
Temperature Coefficient of V _{oc}	-0.270%/°C
Temperature Coefficient of P _{max}	-0.350%/°C

Packaging Configuration

Module per box	31 pieces
Module per 40' container	744 pieces

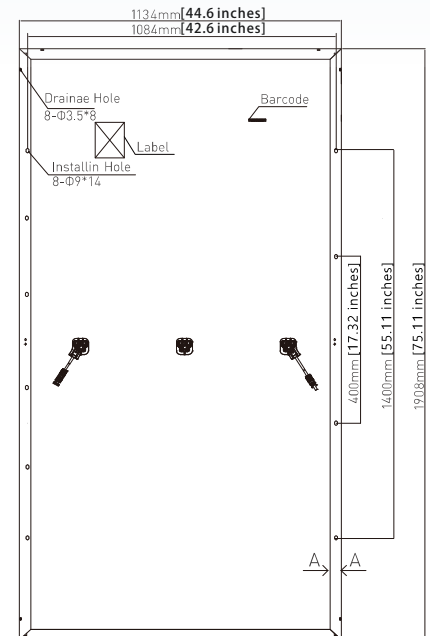
Maximum Ratings

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

Optional

Connector	MC Original
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Module Dimension



Back View

