## GREENSUN SOLAR

## GSM72M GSM410 Watt MONO-FACIAL MODULE



410W
Maximum Power Output
21.1\%

Maximum Module Efficiency

0~+5W
Power Output Guarantee

## Higher customer value

Effectively reduce system BOS cost and achieve lower cost per kilowatt-hour
Increase project profitability
Lower decay rate in the first year and year by year The product is compatible with mainstream system design

High power generation performance
Has excellent IAM and low light response performance verified by a third party
Lower temperature coefficient (-0.34\%) and lower working temperature bring more power generation

Unique layout design brings stronger anti-shadow occlusion ability

Double-sided power generation, according to different installation environments, the back power generation can be increased by up to $25 \%$

[^0]
## High reliability

Apply innovative non-destructive cutting technology to reduce the risk of cracking

Pass the mechanical load test of 5400 Pa on the front and 2400 Pa

## Maximum power increased to 410W

Apply 210 mm large silicon wafer technology and half-cut component technology
Using close-packing technology, the module efficiency is increased to 21.2\%

## Linear Performance Warranty



12 Years Product Warranty 25 Years Linear Power Warranty

## (a) SOLAR

| Electrical Specification (STC*) |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Maximum Power | Pmax $(W)$ | 380 | 385 | 390 | 395 | 400 | 405 | 410 |
| Maximum Power Voltage | Vmp(V) | 39.80 | 39.98 | 40.17 | 40.25 | 40.33 | 40.41 | 40.49 |
| Maximum Power Current | $1 \mathrm{mp}(\mathrm{A})$ | 9.55 | 9.63 | 9.71 | 9.79 | 9.87 | 9.95 | 10.03 |
| Open Circuit Voltage | $\operatorname{Voc}(\mathrm{V})$ | 48.20 | 48.40 | 48.60 | 48.80 | 49.00 | 49.20 | 49.40 |
| Short Circuit Current | $1 \mathrm{sc}(\mathrm{A})$ | 10.13 | 10.21 | 10.29 | 10.37 | 10.45 | 10.53 | 10.61 |
| Module Efficiency | (\%) | 19.6 | 19.8 | 20.1 | 20.3 | 20.6 | 20.8 | 21.1 |
| Power Output Tolerance | (W) |  |  |  | 0~+5 |  |  |  |

Electrical Specification (NOCT*)

| Maximum Power | $P \max (W)$ | 282.22 | 285.98 | 288.97 | 292.65 | 296.33 | 300.01 | 303.69 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Maximum Power Voltage | Vmp (V) | 36.70 | 36.90 | 37.00 | 37.20 | 37.40 | 37.60 | 37.80 |
| Maximum Power Current | $1 \mathrm{mp}(\mathrm{A})$ | 7.69 | 7.75 | 7.81 | 7.87 | 7.93 | 8.00 | 8.06 |
| Open Circuit Voltage | Voc(V) | 44.50 | 44.70 | 44.90 | 45.10 | 45.30 | 45.50 | 45.70 |
| Short Circuit Current | Isc (A) | 8.19 | 8.25 | 8.32 | 8.38 | 8.44 | 8.50 | 8.56 |

* Irradiance $800 \mathrm{~W} / \mathrm{m}^{2}$. Ambient Temperature $20^{\circ} \mathrm{C}$, Wind Speed $1 \mathrm{~m} / \mathrm{s}$


## Mechanical Data

| Number of Cells | $72 \mathrm{Cell} \times[4 \times 18]$ |
| :---: | :---: |
| Dimensions of Module L*W*H (mm) | $1972 \times 885 \times 35 \mathrm{~mm}$ |
| Weight (kg) | 22.2 kg |
| Glass | High transparency solar glass 3.2 mm ( 0.13 inches) |
| Backsheet | White |
| Frame | Silver, anodized aluminium alloy |
| J-Box | IP68Rated |
| Cable | $4.0 \mathrm{~mm}^{2}$ ( 0.006 inches $^{2}$ ), 300 mm ( 11.8 inches) |
| Number of diodes | 3 |
| Wind/ Snow Load | 2400Pa/5400Pa* |
| Connector | MC Compatible |

## Temperature Ratings

| Nominal Operating Cell Temperature (NOCT) | $45 \pm 2^{\circ} \mathrm{C}$ |
| :---: | :---: |
| Temperature Coefficient of Isc | $+0.05 \% /{ }^{\circ} \mathrm{C}$ |
| Temperature Coefficient of Voc | $-0.30 \% /{ }^{\circ} \mathrm{C}$ |
| Temperature Coefficient of PMAX | $-0.39 \% /{ }^{\circ} \mathrm{C}$ |

## Packaging Configuration

| Module per box | 30Pieces |
| :---: | :---: |
| Module per 40' container | 720Pieces |

## Optional

| Connector | MC Original |
| :---: | :---: |






[^0]:    EN 55032:2015, EN55035:2017
    ISO9001:2015: Quality Management System
    ISO14001:2015: Environment Management System
    ISO45001:2018
    Occupational health and safety management systems

