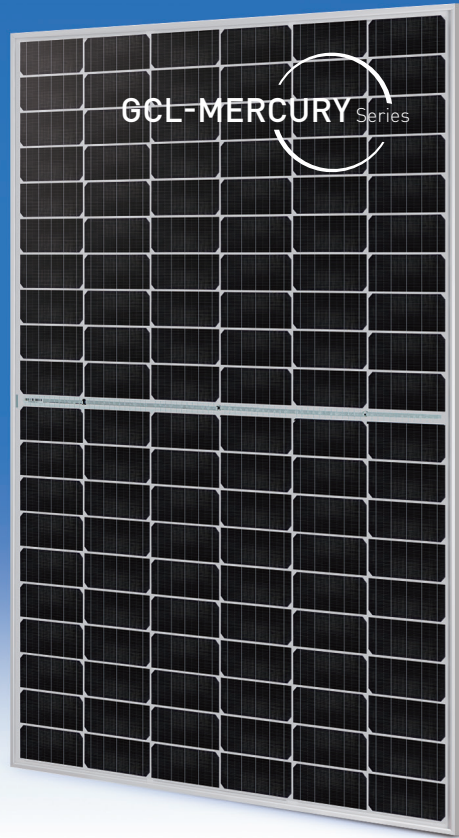




# GCL-M3/60 GCL-M3/60H Monocrystalline Module 285-320W



**320W**

Maximum Power Output

**19.4%**

Maximum Module Efficiency

**0~+5W**

Power Output Guarantee

Cell Type



5BB



MBB



Ideal choice for large scale ground installation



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

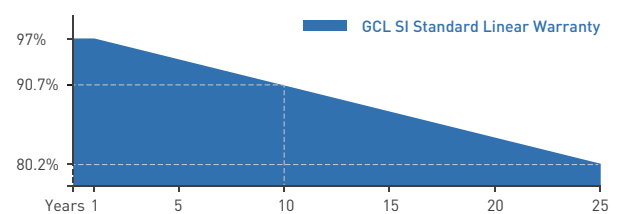
## Company Introduction

GCL System Integration Technology Co. Ltd (002506 Shenzhen Stock) (GCL System) is part of GOLDEN CONCORD Group (GCL) which is an international energy company specializing in clean and sustainable power production. The group, founded in 1990 now employs 30,000 people.

## GCL Delivers Reliable Performance Over Time

- World-class 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



10 Years Product Warranty 25 Years Linear Power Warranty

\* Please refer to GCL standard warranty for details

## Additional Insurance Backed by Swiss RE



\* Please refer to GCL for details

# GCL-M3/60 GCL-M3/60H

## GCL-Mercury Series Monocrystalline Module

285-320W

### Electrical Specification (STC\*)

|                        |                      |       |       |       |       |       |       |       |       |
|------------------------|----------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Maximum Power          | P <sub>max</sub> (W) | 285   | 290   | 295   | 300   | 305   | 310   | 315   | 320   |
| Maximum Power Voltage  | V <sub>mp</sub> (V)  | 31.80 | 32.10 | 32.40 | 32.70 | 33.00 | 33.30 | 33.60 | 33.90 |
| Maximum Power Current  | I <sub>mp</sub> (A)  | 8.96  | 9.04  | 9.11  | 9.17  | 9.24  | 9.31  | 9.38  | 9.44  |
| Open Circuit Voltage   | V <sub>oc</sub> (V)  | 38.80 | 39.00 | 39.30 | 39.60 | 39.90 | 40.20 | 40.50 | 40.80 |
| Short Circuit Current  | I <sub>sc</sub> (A)  | 9.37  | 9.42  | 9.47  | 9.53  | 9.59  | 9.67  | 9.74  | 9.81  |
| Module Efficiency      | (%)                  | 17.3  | 17.6  | 17.9  | 18.2  | 18.5  | 18.8  | 19.1  | 19.4  |
| Power Output Tolerance | (W)                  | 0~+5  |       |       |       |       |       |       |       |

\* Irradiance 1000W/m<sup>2</sup>, Module Temperature 25°C, Air Mass 1.5

### Electrical Specification (NOCT\*)

|                       |                      |        |        |        |        |        |        |        |        |
|-----------------------|----------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| Maximum Power         | P <sub>max</sub> (W) | 212.77 | 216.84 | 220.01 | 223.92 | 227.65 | 231.31 | 235.10 | 238.29 |
| Maximum Power Voltage | V <sub>mp</sub> (V)  | 29.80  | 30.20  | 30.60  | 30.80  | 31.10  | 31.30  | 31.60  | 31.90  |
| Maximum Power Current | I <sub>mp</sub> (A)  | 7.14   | 7.18   | 7.19   | 7.27   | 7.32   | 7.39   | 7.44   | 7.47   |
| Open Circuit Voltage  | V <sub>oc</sub> (V)  | 36.20  | 36.30  | 36.60  | 36.90  | 37.10  | 37.40  | 37.70  | 37.90  |
| Short Circuit Current | I <sub>sc</sub> (A)  | 7.58   | 7.62   | 7.66   | 7.70   | 7.75   | 7.82   | 7.88   | 7.93   |

\* Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20°C, Wind Speed 1m/s

### Mechanical Data

|                                 |  |
|---------------------------------|--|
| Solar Cell Type                 | Mono 78.38x156.75mm  |
| Number of Cells                 | 120 Cells (6x20)   |
| Dimensions of Module L*W*H (mm) | 1665x992x35mm (65.55 x 39.05 x 1.38 inches)                          |
| Weight (kg)                     | 18.8kg   |
| Glass                           | High transparency solar glass 3.2mm (0.13 inches)                    |
| Backsheet                       | White  |
| Frame                           | Silver, anodized aluminium alloy                                     |
| J-Box                           | IP68 Rated   |
| Cable                           | 4.0mm <sup>2</sup> (0.006 inches <sup>2</sup> ), 300mm (11.8 inches) |
| Number of diodes                | 3  |
| Wind/ Snow Load                 | 2400Pa/5400Pa*   |
| Connector                       | MC4 Compatible   |

\* For more details please check the installation manual of GCLSI

### Temperature Ratings

|   |           |
|---|-----------|
| Nominal Operating Cell Temperature (NOCT)   | 44±2°C    |
| Temperature Coefficient of I <sub>sc</sub>  | +0.06%/°C |
| Temperature Coefficient of V <sub>oc</sub>  | -0.30%/°C |
| Temperature Coefficient of P <sub>MAX</sub> | -0.38%/°C |

### Maximum Ratings

|                         |               |
|-------------------------|---------------|
| Operational Temperature | -40~+85°C     |
| Maximum System Voltage  | 1000V DC      |
|                         | 1500V DC -(H) |
| Max Series Fuse Rating  | 15A           |

### Packaging Configuration

|                          |            |
|--------------------------|------------|
| Module per box           | 30 pieces  |
| Module per 40' container | 780 pieces |

### Optional

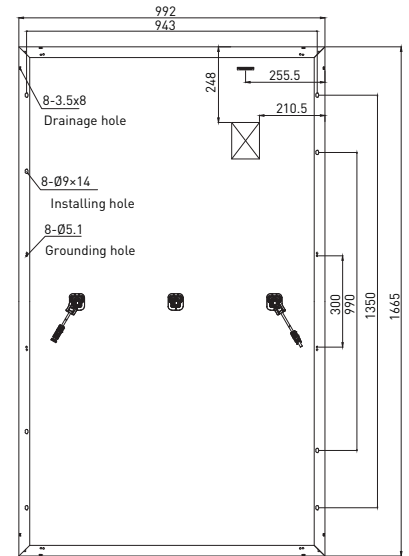
Connector:  Original MC4



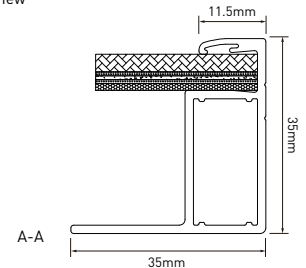
Contact Us for More Information

website: [en.gclsi.com](http://en.gclsi.com) email: [gclsisales@gclsi.com](mailto:gclsisales@gclsi.com)

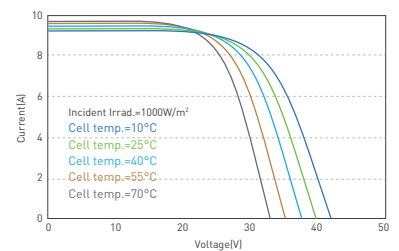
### Module Dimension



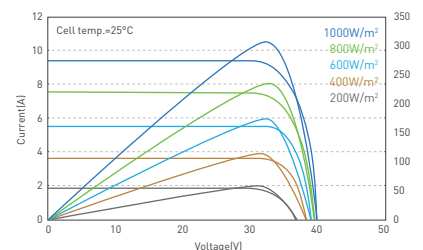
Back View



### U-I Curve at Different Temperature (305W)



### U-I/P-U Curve at Different Irradiation (305W)



CAUTION: READ INSTALLATION MANUAL BEFORE USING THE PRODUCT