

GCL

M12/66GDF



655-675W

**Bifacial Dual Glass
Monocrystalline Module**

675W

Maximum Power Output

21.7%

Maximum Module Efficiency

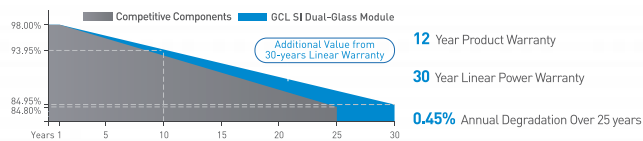
0~+5W

Power Output Guarantee

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: ISO 9001, ISO 14001 and ISO 45001
- 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



Ideal choice for large scale ground installation



Non-destructive cutting, reduce potential micro crack risk



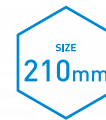
Sand blowing test, salt mist test and ammonia test passed to endure harsh environments



Withstand up to 1500V system voltage effectively reduce BOS cost



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



Large size silicon wafer module can reduce the cost of PV support bracket, combining manifolds, cable, land and so on, thus thinning the LCOE

Additional Insurance Backed by Swiss RE

* Please refer to GCL for details



Electrical Specification (STC*)

Maximum Power	Pmax(W)	655	660	665	670	675
Maximum Power Voltage	Vmp(V)	37.80	38.00	38.20	38.40	38.60
Maximum Power Current	Imp(A)	17.33	17.37	17.41	17.45	17.49
Open Circuit Voltage	Voc(V)	45.60	45.80	46.00	46.20	46.40
Short Circuit Current	Isc(A)	18.26	18.31	18.36	18.41	18.46
Module Efficiency	(%)	21.1	21.2	21.4	21.6	21.7

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

Electrical Specification (NOCT*)

Maximum Power	Pmax (W)	495.6	499.4	503.1	506.9	510.7
Maximum Power Voltage	Vmp (V)	35.26	35.45	35.64	35.82	36.01
Maximum Power Current	Imp (A)	14.05	14.09	14.12	14.15	14.18
Open Circuit Voltage	Voc(V)	42.96	43.14	43.33	43.52	43.71
Short Circuit Current	Isc (A)	14.72	14.76	14.80	14.84	14.88

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

Electrical characteristics with different power bin (reference to 10% Irradiance ratio)

Maximum Power	Pmax (W)	700.9	706.2	711.6	716.9	722.3
Maximum Power Voltage	Vmp (V)	37.80	38.00	38.20	38.40	38.60
Maximum Power Current	Imp (A)	18.54	18.58	18.63	18.67	18.71
Open Circuit Voltage	Voc(V)	45.60	45.80	46.00	46.20	46.40
Short Circuit Current	Isc (A)	19.54	19.59	19.65	19.70	19.75

Mechanical Data

Number of Cells	132 Cells (6×22)
Dimensions of Module L*W*H (mm)	2384×1303×33mm [93.86×51.30×1.30 inches]
Weight (kg)	38.5 kg
Front Side Glass	2.0mm (0.08 inches), Anti-Reflection Coating
Back Side Glass	2.0mm (0.08 inches), Heat Strengthened Glass
Frame	Anodized aluminium alloy
J-Box	IP68 Rated
Cable	4.0mm², Portrait: +300/-200 mm length can be customized
Number of diodes	3
Wind/ Snow Load	2400Pa/ 5400Pa*
Connector	MC Compatible
Bifaciality	70±5%

* For more details please check the installation manual of GCLSI

Temperature Ratings

Nominal Operating Cell Temperature (NOCT)	45±2°C
Temperature Coefficient of Isc	+0.05%/°C
Temperature Coefficient of Voc	-0.28%/°C
Temperature Coefficient of P _{MAX}	-0.35%/°C

Maximum Ratings

Operational Temperature	-40~+85°C
Maximum System Voltage	1500V DC
Max Series Fuse Rating	35A

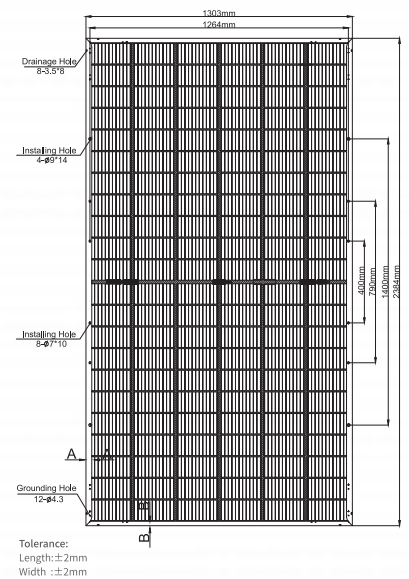
Optional

Connector: Original MC4

Packaging Configuration

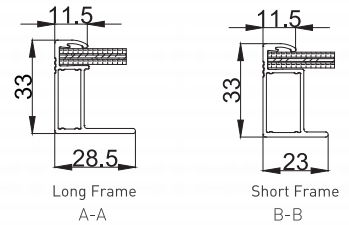
Module per box	33 pieces
Module per 40' container	594 pieces

Module Dimension

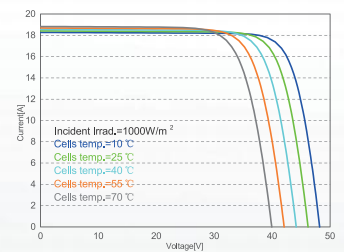


Tolerance:
Length: ±2mm
Width: ±2mm

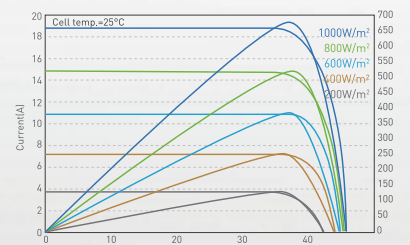
Back View



I-V Curve at Different Temperature (670W)



I/P-V Curve at Different Irradiation (670W)



CAUTION: READ INSTALLATION MANUAL BEFORE USING THE PRODUCT

Contact Us for More Information

website: www.gclsi.com email: gclsisales@gclsi.com

