

# GCL- M12/66GDF



**655-675W**

**Bifacial Dual Glass  
Monocrystalline Module**

**675W**

Maximum Power Output

**21.73%**

Maximum Module Efficiency

**0~+5W**

Power Output Guarantee



Non-destructive cutting,  
reduce potential micro  
crack risk



Large size silicon wafer  
module can reduce the cost of PV  
support bracket, combining mani-  
folds , cable, land and soon, thus  
thinning the LCOE



Ideal choice for large  
scale ground installation



Withstand up to 1500V system  
voltage effectively reduce BOS cost

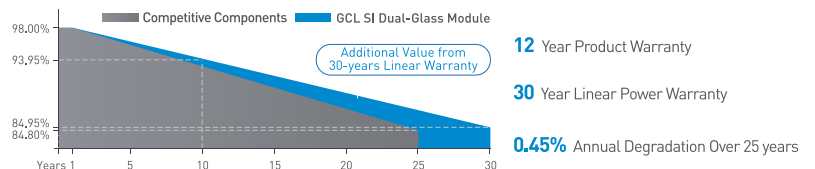
## GCL Delivers Reliable Performance Over Time

- World-class manufacturer of crystalline silicon photovoltaic modules
- Fully automatic facility and world-class technology
- Long term reliability tests
- 2x100% EL inspection ensuring defect-free modules

## Comprehensive System and Product Certifications

- IEC61215, IEC61730
- ISO9001:2015 Quality management systems
- ISO14001:2015 Environmental management systems
- ISO45001:2018 Occupational health and safety management systems
- IEC62941:2019 Terrestrial photovoltaic(PV modules-Quality system for PV module manufacturing)

## Linear Performance Warranty



\* Please refer to GCL standard warranty for details

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	(%)	21.09	21.25	21.41	21.57	21.73

\* Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass 1.5  
Pmax Tolerance: ±3%

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/m<sup>2</sup>, 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 (6x22)
Dimensions of Module L*W*H (mm)	2384x1303x33mm (93.86x51.30x1.30 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
Fire Rating	IEC Class C
Protection Class	Class II
Cable	4.0mm <sup>2</sup> , Portrait: +300/-200mm length can be customized
Number of diodes	3
Wind/ Snow Load	2400Pa/ 5400Pa*
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 <sub>MAX</sub>	-0.35%/°C

Maximum Ratings

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

Packaging Configuration

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

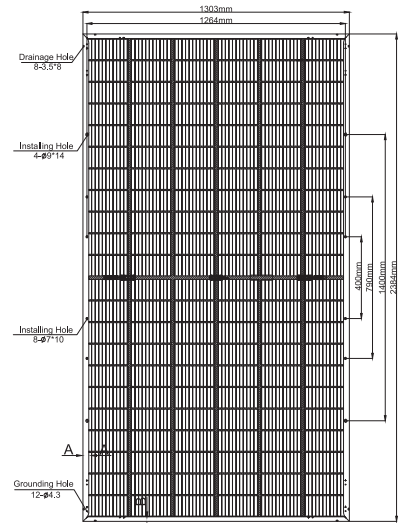
Tolerance

Sorting / Voc / Isc Tolerance	0~+5W /±3% /±4%
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Connector

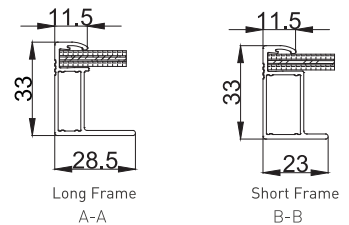
Bright	B01 / B05x	ChuangYuan	PV-CY20L / PV-CY03L
Haitian	PV-HT03	Zhonghuan	PV-ZH202B
UKT	PV-C002-xy	Zerun	Z4S-abcde
Xtong	PV-XT101.1/PV-XT101.2 / XT2		
Staubli	PV-KST4-EVO 2/xy-UR / PV-KST4-EV02A/xy PV-KBT4-EVO 2/xy-UR / PV-KBT4-EV02A/xy		

Module Dimension

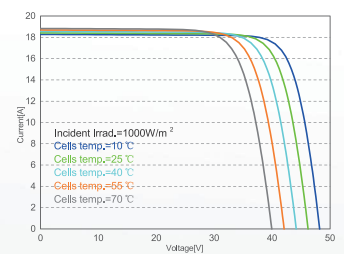


Tolerance:  
Length:±2mm  
Width :±2mm

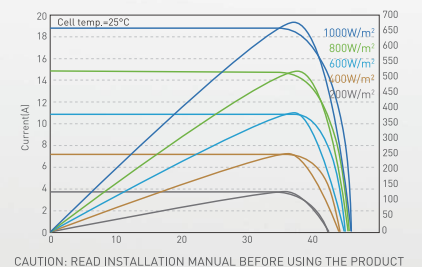
Back View



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

GCL System Integration Technology Co., Ltd.

address: Jianghai Economic Zone, Nanqiao Town, Fengxian District, 201406 Shanghai P. R. China

website: www.gclsi.com

email: gclsales@gclsi.com

