

GCL- NT10/72GDF



580-595 W

**Bifacial Dual Glass
Monocrystalline Module**

595W

Maximum Power Output

23.0%

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

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)



High conversion efficiency due to top quality wafers and advanced cell technology



Ideal choice for large scale ground installation

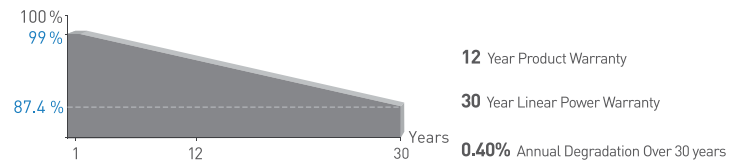


N type technology: The N-type module has better reliability and lower LID/LETID



Ideal choice for large scale ground installation

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 & BNPI) | GCL-NT10/72GDF xxx(xxx=580~595)

Testing Conditions		STC	BNPI	STC	BNPI	STC	BNPI	STC	BNPI
Maximum Power	Pmax(W)	580	635	585	640	590	645	595	650
Maximum Power Voltage	Vmp(V)	43.75	/	43.95	/	44.15	/	44.35	/
Maximum Power Current	Imp(A)	13.26	/	13.31	/	13.37	/	13.42	/
Open Circuit Voltage	Voc(V)	51.90	52.00	52.05	52.15	52.20	52.30	52.35	52.45
Short Circuit Current	Isc(A)	14.01	15.39	14.07	15.45	14.13	15.51	14.19	15.57
Module Efficiency	(%)	22.5		22.6		22.8		23.0	

* STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass 1.5 *BNPI: Irradiance of front 1000W/m², rear 135W/m²
 * Measurement uncertainty: ± 3% [Pmax]; Voc Tolerance: ± 3%; Isc Tolerance: ± 4%

Electrical Specification (NOCT*)

Maximum Power	Pmax (W)	436.6	440.3	444.1	447.9
Maximum Power Voltage	Vmp (V)	41.11	41.30	41.50	41.70
Maximum Power Current	Imp (A)	10.62	10.66	10.70	10.74
Open Circuit Voltage	Voc(V)	49.30	49.45	49.60	49.75
Short Circuit Current	Isc (A)	11.31	11.36	11.41	11.46

* 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)	626.5	631.6	637.5	642.6
Maximum Power Voltage	Vmp (V)	43.75	43.95	44.15	44.35
Maximum Power Current	Imp (A)	14.32	14.37	14.44	14.49
Open Circuit Voltage	Voc(V)	51.90	52.05	52.20	52.35
Short Circuit Current	Isc (A)	15.13	15.20	15.26	15.33

Mechanical Data

Number of Cells	144 Cells (6×24)
Dimensions of Module L*W*H (mm)	2278×1134×30mm (89.68×44.65×1.18 inches)
Weight (kg)	31.2 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	4.0mm ² , Portrait: +300/-200mm length can be customized
Fire rating	IEC Class C
Wind/ Snow Load	2400Pa/ 5400Pa*
Protection Class	ClassII
Bifaciality	Pmax=80%, Voc=95%, Isc=80% (±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	+0.045%/°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of Pmax	-0.29%/°C

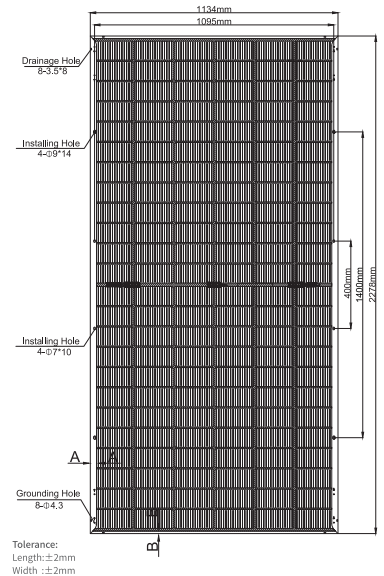
Maximum Ratings

Operational Temperature	-40~+85°C
Maximum System Voltage	1500V DC
Max Series Fuse Rating	30A

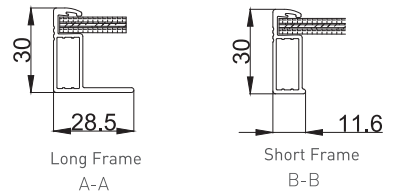
Packaging Configuration

Module per box	36 pieces
Module per 40' container	720 pieces

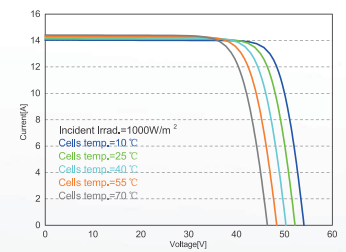
Module Dimension



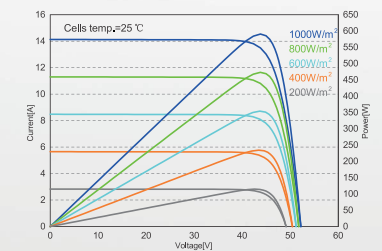
Back View



I-V Curve at Different Temperature (595W)



I-V/P-V Curve at Different Irradiation (595W)



CAUTION: READ INSTALLATION MANUAL BEFORE USING THE PRODUCT

Contact Us for More Information

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Optional/Connector

Serial	Kind of component	Manufacturer	Specification
1	Connector	Suzhou Bright Photovoltaic Electronic Technology Co.,Ltd.	B01
2		Jiangsu Haitian Microelectronics Corp.	PV-HT03x (x=0 or 1 or 2)
3		Hefei GCL System Integration New Energy Technology Co., Ltd.	GCL-01
4			GCL-02
5		Suzhou Xtong Photovoltaic Technologies Co., Ltd.	PV-XT101.1
6			PV-XT101.2
7			XT2
8		Stäubli Electrical Connectors AG	PV-KST4-EVO 2/xy_UR (male)
9			PV-KBT4-EVO 2/xy_UR (female)
10			PV-KST4-EVO2A/xy (male)
11			PV-KBT4-EVO2A/xy (female)

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