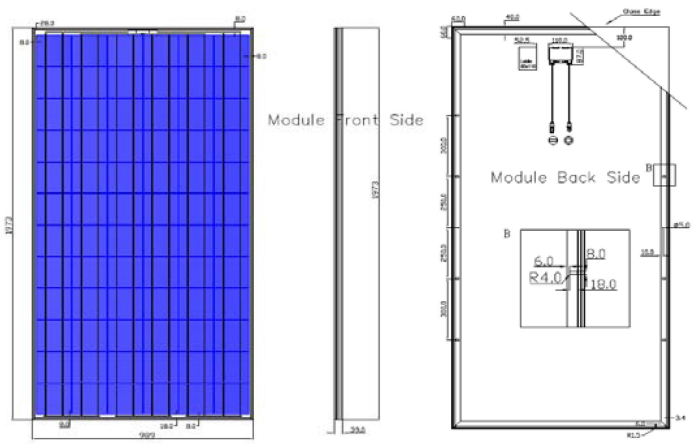
GCL Photovoltaic Module

GCL-72-280/285/290/295/300

GCL branded modules can be used for both off-grid and on-grid applications. With high-yield efficiency and long-term performance they are ideal for utility, commercial or residential roof-top installations. GCL stands behind the modules with superior manufacturing, quality control and design.



Features

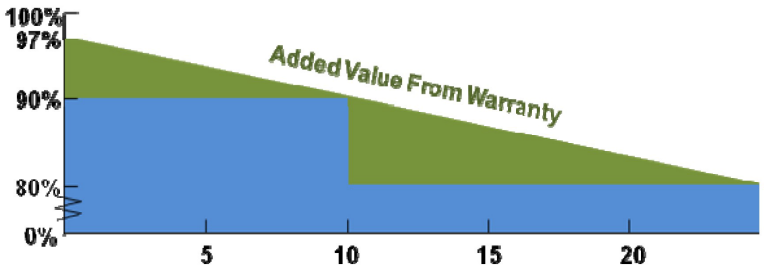
- GCL is a virtually vertically integrated company from the wafers all the way to solar farm. With GCL guaranteed wafers the quality is carried all the way through the product and will provide lasting power over the 25 year warranty.
- GCL has the largest market cap in the PV industry. GCL has been in power generation business 20 years and is going to be here standing behind the warranty for 25 years more.
- GCL modules decrease installation time and costs with our standard Easy-installation compatible frames.

Quality Certifications

*Complies with UL1703 based on ETL testing

Performance Overview

- Industry leading positive power tolerance from 0 to 3%. Module efficiencies as high as 15.98%
- Certified to withstand snow loads up to 5400Pa
- 10-year product workmanship warranty and 25-year linear power output warranty

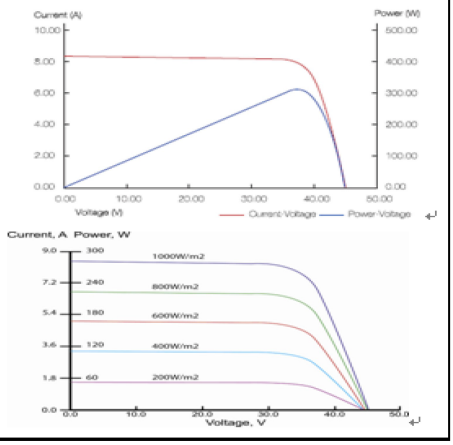


Electrical Data

TYPE	GCL-72-280 280	GCL-72-285 285	GCL-72-290 290	GCL-72-295 295	GCL-72-300 300
Rated Maximum Power at STC (W)	280	285	290	295	300
Open Circuit Voltage (Voc/V)	45	44.67	45.06	45.24	45.31
Maximum Power Voltage (Vmp/V)	35.5	35.81	35.89	36.31	36.74
Short Circuit Current (Isc/A)	8.35	8.55	8.64	8.66	8.68
Maximum Power Current (Imp/A)	7.89	7.95	8.16	8.15	8.18
Module Efficiency [%]	14.44	14.69	14.95	15.21	15.47
Power Tolerance(%)	0~+3				
αIsc (%/℃)	+0.04				
βVoc(%/℃)	-0.32				
γPmp (%/℃)	-0.44				

I-V Curve

Typical output under different irradiation and the correlation between Isc/Voc/ Pmax and Temperature map



Standard Test Conditions: Irradiance of 1000W/ m^2 , spectrum AM 1.5 and cell temperature of 25°C

Mechanical Parameters

Cell (mm)	Poly 156×156 Tainergy
Weight (kg)	22.55
Dimensions (L×W×H)(mm)	1973x989×39
Cable Length (mm)	≥1000
Cable cross section size (mm2)	4
No. of cells and connections	72 (6x12)
No. of diodes	3
Packing configuration	27 pcs./Pallet
Module Pieces per Container (40 ft. HQ)	594 pcs

Working Conditions

Maximum System Voltage	DC 1000V(TüV) / 600V(UL)
Operating Temp	-40℃~+85℃
Maximum Series Fuse	15 A
Max.Wind Load/Max.Snow Load	2400Pa / 5400Pa
Grounding conductivity	<0.1Ω
NOCT	45±2℃
Application Class	Class A
Insulation Resistance	≥100MΩ
Connector	MC4 or MC4 comparable