



GCL-P6/60Hxxx Polycrystalline Module 290-310W



310W $\pm 3\%$
Maximum Power Output

18.6%
Maximum Module Efficiency



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



Special cell process ensures great performance under low irradiance conditions...



Highly transparent self-cleaning glass brings additional yield and easy maintenance



Optimized system performance due to module level current sorting

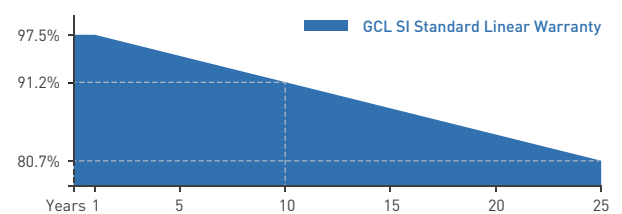
Company Introduction

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
- 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

Electrical Specification (STC*)

Parameter	Unit	290[±3%]	295[±3%]	300[±3%]	305[±3%]	310[±3%]
Maximum Power	P _{max} (W)	290[±3%]	295[±3%]	300[±3%]	305[±3%]	310[±3%]
Maximum Power Voltage	V _{mp} (V)	32.20	32.40	32.60	32.80	32.98
Maximum Power Current	I _{mp} (A)	9.01	9.10	9.20	9.30	9.40
Open Circuit Voltage	V _{oc} (V)	39.70[±3%]	40.00[±3%]	40.30[±3%]	40.60[±3%]	40.90[±3%]
Short Circuit Current	I _{sc} (A)	9.69[±4%]	9.74[±4%]	9.79[±4%]	9.84[±4%]	9.89[±4%]
Module Efficiency	(%)	17.4	17.7	18.0	18.3	18.6
Sorting Tolerance	(W)	0~+5				

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

Electrical Specification (NOCT*)

Parameter	Unit	215.92	219.60	222.57	226.75	230.82
Maximum Power	P _{max} (W)	215.92	219.60	222.57	226.75	230.82
Maximum Power Voltage	V _{mp} (V)	29.70	30.00	30.20	30.60	30.90
Maximum Power Current	I _{mp} (A)	7.27	7.32	7.37	7.41	7.47
Open Circuit Voltage	V _{oc} (V)	36.90	37.20	37.40	37.70	38.00
Short Circuit Current	I _{sc} (A)	7.83	7.87	7.91	7.95	7.99

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

Mechanical Data

Cell Orientation	60 Cells (6×10)
Module Dimensions	1666×1000×35mm (65.59 × 39.37 × 1.38 inches)
Weight	18.5kg
Glass	High transparency solar glass 3.2mm (0.13 inches)
Backsheet	White
Frame	Silver, anodized aluminium alloy
J-Box	IP68 Rated
Cables	4.0mm ² [0.006 inches ²], 900mm (35.4 inches)
Connector	QC Solar(Suzhou) Corporation, QC4.10-cd Suzhou Bright Photovoltaic Electronic Technology Co., Ltd, B01 Suzhou Xtong Phtovoltaic Technology Co.,Ltd. PV-XT101.1 Jiangsu Hatitian Microelectronics Corp. Minor Enterprise, PV-HT03 Staubli Electrical Connectors AG, PV-KST4-EVO 2/xy-UR PV-KBT4-EVO 2/xy-UR
Static mechanical load	Design load: 3600Pa (downward) / 1600Pa (upward). γ _m =1.5

* For more details please check the installation manual of GCLSI

Temperature Ratings

Nominal Operating Cell Temperature (NOCT)	45±2°C
Temperature Coefficient of I _{sc}	+0.050%/°C
Temperature Coefficient of V _{oc}	-0.30%/°C
Temperature Coefficient of P _{MAX}	-0.39%/°C

Maximum Ratings

Operational Temperature	-40~+85°C
Maximum System Voltage	1500V DC(IEC)
Max Series Fuse Rating	20A

Packaging Configuration

Module per box	30 pieces
Module per 40' container	840 pieces

Modules are assembled in China and Vietnam.

Factory1: Jiangsu Ds Photovoltaic Technology Co., Ltd.
Address: No.6 Konggang New District, Guozhuang Town, Jurong, 212434 Jiangsu Province, P. R. China

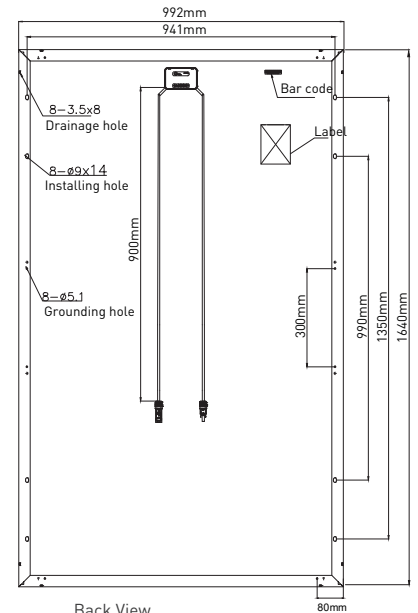
Factory2: Zhangjiagang GCL System Integration Technology Co.,Ltd.
Address: 288# Chenfeng Road, Yangshe Town, Zhangjiagang City, 215600 Jiangsu Province, P. R. China

Factory3: VINA SOLAR TECHNOLOGY CO., LTD
Address: lot CN-03 Factory E12, Van Trung Industrial Park Bac Giang Province, Viet Nam

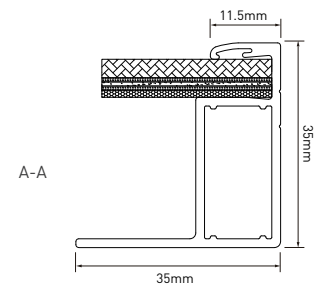
Factory4: Jinzhai GCL System Integration Technology Development Co., Ltd.
Address: East of Baimafeng Road, Modern Industrial Park, Jinzhai county, Anhui Province, P.R.China

Factory5: Funing GCL System Integration Technology Co., Ltd.
Address: No. 888(A) Hong Kong Road, Funing Economic Development Zone, Yangcheng City, Jiangsu Province P.R. China

Module Dimension

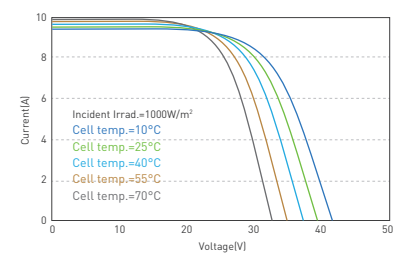


Back View

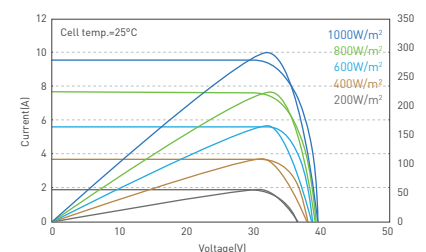


A-A

U-I Curve at Different Temperature (290W)



U-I/P-U Curve at Different Irradiation (290W)



CAUTION: READ INSTALLATION MANUAL BEFORE USING THE PRODUCT