

SiRo  **Anti-glare**



GCL-NT12R/66GDF

600-620W

N-type Bifacial Double Glass Module

TOPCon

Master light & shadow
embrace pure vision

Low degradation ensures reliable
output over the module's lifetime

High bifaciality for superior rear-side
power output

Excellent temperature coefficient ensures
power generation in high temperature areas

Enhanced low-light response ensures
stable output under low-light conditions

Sound quality management and
product certification system

The product has obtained:

IEC61215 / IEC61730

Manufacturer has been certified :

ISO 9001:2015: Quality management systems

ISO 14001:2015: Environmental management systems

ISO 45001:2018: Occupational health and safety management systems



Mechanical Data		Module Dimension	
		Dimension Tolerance: Length:±2mm Width:±2mm	
Cell Type	N-Type Monocrystalline Solar Cell		
Number of Cells	132 Cells (6×22)		
Dimensions of Module	2382×1134×30mm (93.78×44.65×1.18 inches)		
Weight	32.5 kg		
Front Side Glass	2.0mm (0.08 inches), Anti-Reflection Coating (Anti-glare Glass)		
Back Side Glass	2.0mm (0.08 inches), Heat Strengthened Glass (Anti-glare Glass)		
Frame	Anodized aluminium alloy		
J-Box	IP68 Rated, 3 diodes		
Cable	4.0mm ² , +300/-200mm (length can be customized)		
Connector	GCL-01/GCL-02/MC4-EVO2A/others		
Packaging Configuration	Module per box: 36 pieces Module per 40' HQ: 720 pieces		

The technical drawing shows the front and side views of the solar module. The front view is a rectangle with dimensions 1134mm (width) and 2382mm (height). It features a grid of cells and labels for 'Drainage Hole 8-3.5*8', 'Installing Hole 4-9*14', and 'Grounding Hole 8-6*3'. The side view shows the module's thickness of 30mm and the frame profile. Two cross-sections are shown: 'Long Frame A-A' with a width of 28.5mm and 'Short Frame B-B' with a width of 10.5mm.

Electrical Specification (STC*) * Irradiance 1000W/m ² , Cell Temperature 25°C, Air Mass 1.5						
Maximum Power	Pmax (W)	600	605	610	615	620
Maximum Power Voltage	Vmp(V)	40.14	40.34	40.53	40.73	40.93
Maximum Power Current	Imp (A)	14.95	15.00	15.05	15.10	15.15
Open Circuit Voltage	Voc (V)	47.80	47.95	48.10	48.25	48.40
Short Circuit Current	Isc (A)	15.75	15.80	15.85	15.90	15.95
Module Efficiency	(%)	22.2	22.4	22.6	22.8	23.0
Power Output Guarantee	(%)	0~+3				
Temperature Coefficient of Isc	(Isc)	+0.045%/°C				
Temperature Coefficient of Voc	(Voc)	-0.25%/°C				
Temperature Coefficient of Pmax	(Pmax)	-0.29%/°C				

Electrical Characteristics with Different Power Bin (Reference to 10% Irradiance Ratio)						
Maximum Power	Pmax (W)	648.3	653.5	658.6	664.3	669.6
Maximum Power Voltage	Vmp(V)	40.14	40.34	40.53	40.73	40.93
Maximum Power Current	Imp (A)	16.15	16.20	16.25	16.31	16.36
Open Circuit Voltage	Voc (V)	47.80	47.95	48.10	48.25	48.40
Short Circuit Current	Isc (A)	17.01	17.06	17.12	17.17	17.23

Application Conditions

Operational Temperature	-40~+85°C
Maximum System Voltage	1500V DC
Max Series Fuse Rating	35A
Wind/ Snow Load	2400Pa/5400Pa*
Bifaciality	80±5%

*For more details please check the installation manual of GCLSI

Linear Performance Warranty

99.0%

87.4%

12 year
Product warranty

30 year
Linear power warranty

1%
First year power attenuation

0.40%
Annual degradation over 30 years