

# **GCL-P3/72**

[ Sapphire Plus ]
HIGH EFFICIENCY MULTICRYSTALLINE MODULE

GCL-P3/72 320-335 Watt

335 W
MAXIMUM POWER OUTPUT

16.9%
MAXIMUM MODULE EFFICIENCY

0~+5 W
POWER OUTPUT GUARANTEE

### **Trust GCL to Deliver 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:
   ISO9001:2008, ISO 14001: 2004 and OHSAS: 18001 2007
- Tested for harsh environments (salt mist, ammonia corrosion and sand blowing test: IEC 61701, IEC 62716, DIN EN 60068-2-68)
- Long term reliability tests
- 2\*100% EL inspection ensuring defect-free modules

## LINEAR PERFORMANCE WARRANTY

10 Years Product Warranty 25 Years Linear Power Warranty





Ideal choice for large scale ground installation



Selected encapsulating material and stringent production process control ensure product highly PID resistant and snail trails free



Special cutting and soldering technology leads to low hotspot risk



Passed sand blowing test, salt mist test and ammonia test; flexible for harsh environments



Optimized system performance by module level current sorting

Additional insurance backed by Swiss RE

















# **GCL-P3/72**

HIGH EFFICIENCY MONOCRYSTALLINE MODULE

ELECTRICAL SPECIFICATION (STC)					
Maximum Power P	max (W)	320	325	330	335
Maximum Power Voltage	Vm(V)	37.51	37.68	37.97	38.32
Maximum Power Current	Im(A)	8.53	8.63	8.69	8.74
Open Circuit Voltage	Voc(V)	45.6	45.95	46.18	46.41
Short Circuit Current	Isc(A)	9.03	9.12	9.23	9.31
Module Efficiency	(%)	16.1	16.4	16.6	16.9
Power Output Tolerance	Pm(W)		0~	+5	

 $Values\ at\ Standard\ Test\ Conditions\ STC\ (Air\ Mass\ AM1.5,\ Irradiance\ 1000W/m^2\ ,\ Cell\ Temperature\ 25^{\circ}C).$ 

ELECTRICAL DATA (NOCT)					
Maximum Power P	max (W)	232.9	236.7	239.8	242.6
Maximum Power Voltage	Vm(V)	34.2	34.4	34.6	34.8
Maximum Power Current	Im(A)	6.81	6.88	6.93	6.97
Open Circuit Voltage	Voc(V)	42.5	42.7	42.9	43.1
Short Circuit Current	Isc(A)	7.16	7.21	7.29	7.35

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

MECHANICAL DATA				
Solar Cells	Poly 78×156mm			
Cell Orientation	144 Cells (12×12)			
Module Dimensions	1945×1020×40mm (77×40×1.57inches)			
Weight	21.5kg			
Glass	High transparency solar glass 3.2mm (0.13 inches)			
Backsheet	White			
Frame	Silver, anodized aluminium alloy			
J-Box	IP67 Rated			
Cables	4.0mm <sup>2</sup> (0.016 inches <sup>2</sup> ), 500mm (19.7 inches)			
Connector	Original MC4 or Compatible			

 $<sup>{}^\</sup>star For more \, details \, please \, check \, the \, installation \, manual \, of \, GCLSI$ 

TEMPERATURE RATINGS				
Nominal Operating Cell Temperature (NOCT)	45±2°C			
Temperature Coefficient of P <sub>MAX</sub>	-0.41%/°C			
Temperature Coefficient of Voc	-0.32%/°C			
Temperature Coefficient of Isc	+0.055%/°C			

MAXIMUM RATINGS				
Operational Temperature	-40~+85°C			
Maximum System Voltage	1000V DC(IEC)			
Max Series Fuse Rating	15A			
Max Series Fuse Rating	15A			

#### WARRANTY

10 years Product Workmanship Warranty 25 years Linear Power Warranty

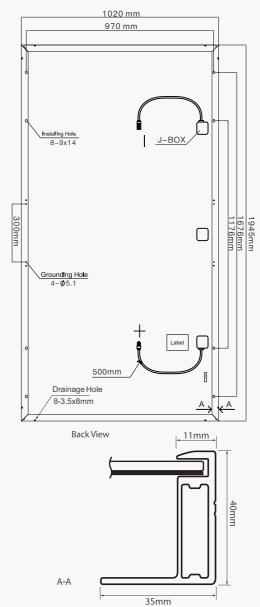
(Please refer to GCL standard warranty for details)

PACKAGING CONFIGURATION

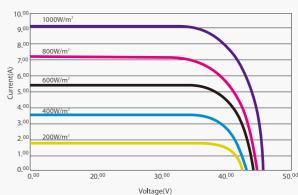
Modules per box: 26 pieces

Modules per 40'HD container: 624pieces

#### MODULE DIMENSION



### I-V CURVES OF MODULE (320W)



Excellent performance under weak light conditions: at an irradiation intensity of  $200W/m^2$   $W/m(AM 1.5, 25 ^{\circ}C)$ , 96.5% or higher of the STC efficiency  $(1000 \, W/m^2)$  is achieved

