








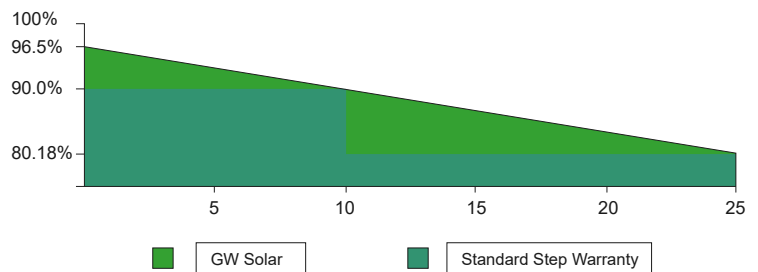
GW-D156-60	280~310W
Mono-crystalline Module	Power Output Range
19.0%	0~+5W
Maximum Efficiency	Power Tolerance

Product Specifications book

- 
 PID free module
 Anti-PID cell technology
 Anti-PID encapsulation technology
- 
 UL 1703, IEC 61215, IEC 61730 and CE
 ISO 9001 for Quality Management Systems
 ISO 14001 for Environmental Management Systems
 ISO 18001 Occupational Health and Safety System
- 
 Lower annual power degradation and current sorting reduces the mismatch power loss in system operation
- 
 Improve safety
 1500VDC (TUV) / 1500VDC (CSA) certified
 2 EL inspections per cell/module for defect-free consistency
- 
 Load certificates: wind to 2400Pa and snow to 5400Pa

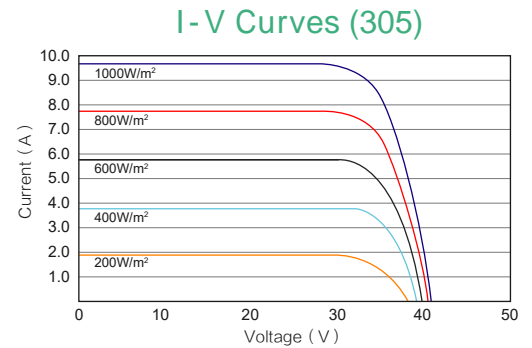


LINEAR PERFORMANCE WARRANTY

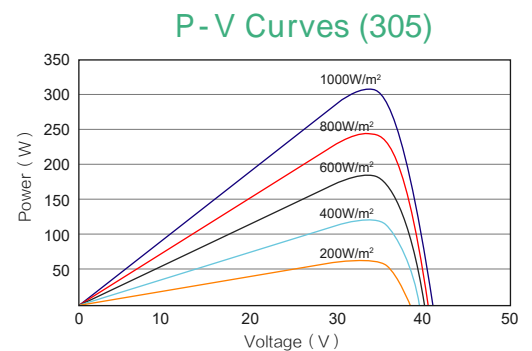


Munich RE Insurance Global Coverage

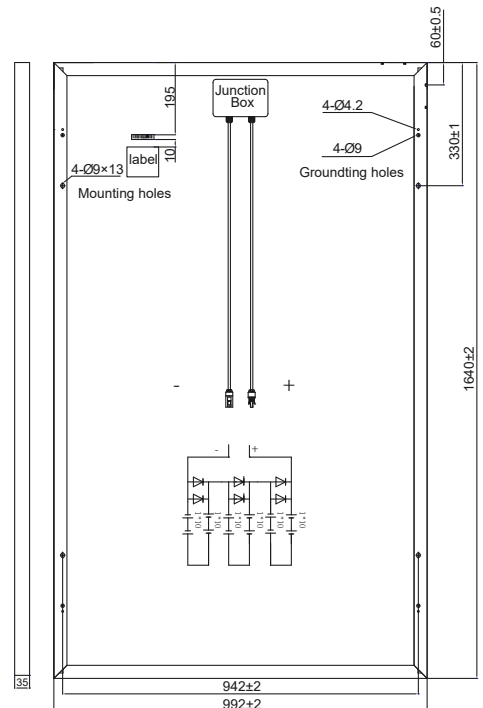
Electrical Specifications (standard test conditions)							
Maximum Power -P _{MAX} (Wp)	280	285	290	295	300	305	310
Power Tolerance -P _{MAX} (W)	0 ~ +5						
Maximum power point of operating voltage -VMPP (V)	31.7	31.8	32.2	32.5	32.6	32.9	33.1
Maximum power point of operating current -IMPP (A)	8.84	8.97	9.01	9.08	9.19	9.28	9.37
Open circuit voltage -V _{oc} (V)*	38.4	38.5	38.9	39.6	39.8	40.0	40.2
Short circuit current - I _{sc} (A)	9.42	9.51	9.66	9.68	9.77	9.85	9.94
Module Efficiency η _m (%)	17.2	17.5	17.8	18.1	18.4	18.8	19.0
Standard test conditions under Measured Value:(air quality AM1.5, Irradiance 1000W / m ² , cell temperature 25 °C)							



Electrical Index (under nominal operating cell temperature conditions)							
Maximum Power-P _{MAX} (Wp)	209	212	216	220	223	227	231
Maximum power point of operating voltage -VMPP (V)	29.4	29.5	29.9	30.1	30.2	30.5	30.7
Maximum power point of operating current -IMPP (A)	7.10	7.21	7.24	7.30	7.38	7.46	7.53
Open circuit voltage -V _{oc} (V)*	35.7	35.8	36.2	36.8	37.0	37.2	37.4
Short circuit current - I _{sc} (A)	7.61	7.68	7.80	7.82	7.89	7.95	8.03
NOCT: Irradiance 800W / m ² , ambient temperature of 20 °C, wind speed 1m / s							



Temperature Rating		Limit parameter	
Nominal Operating Cell Temperature (NOCT)	44°C (±2°C)	Working Temperature	-40~+85°C
Maximum power (P _{MAX}) Temperature Coefficient	- 0.39%/°C	Maximum fuse rated Current	15A
Open-circuit voltage (V _{OC}) Temperature Coefficient	- 0.29%/°C	Maximum system voltage	1500VDC (TUV)
Short circuit current (I _{SC}) Temperature Coefficient	0.05%/°C	Maximum system voltage	1500VDC (CSA)



Mechanical Specifications	
Solar cell Type	156.75mm × 156.75mm Mono-crystalline
Number of Cells	1 module 60pieces (6 × 10)
Dimensions	1640*992*35mm 64.57*39.06*1.38 inch
Weight	18.6 kg
Glass	3.2mm, High transparency, anti-reflective coatings toughened glass
Junction Box	Protection level IP 68
Frame	Black/ white, anodized aluminum
Backsheet	Black/ white
Busbar	Black/ white
Cable	4.0 mm ² , 1000 mm Photovoltaic dedicated cables
Connector	MC4 compatible

Warranty

- 15-year warranty for product
- 25-year warranty for linear power
- Please refer to product warranty for details

Packaging Method

- Modules per box: 30 pcs
- Modules per 40 ft container: 840 pcs
- Installation depends on the mechanical load