

WM-160-GX

WEL MERLIN MONO SERIES

36 CELLS – WITH GLASS TO BACKSHEET

Waaree Energies introduces the first energy efficient module in India. It is designed to protect against vibration induced damages and increase the power performance through strengthened solar cell by sandwiching the fragile Silicon cell between two copper grids, and by collecting current in a distributed fashion which eliminates the electrical impact of cell crack to improve the power performance and long life reliability. WM GX-series panels are made with high quality Waaree Merlin mono crystalline solar cells. GX module is suitable for commercial & residential rooftop, carports, metal roof, etc.



KEY FEATURES

- Thirty-six (36) series connected, high efficiency, Merlin solar cells optimize panel performance
- Multi bus-bar is swapped by ultra thin copper grids
- Better current distribution results in low series resistance
- Eliminate bottom tabbing ribbons by using cell orientation to complete the interconnect
- Enhanced Fill Factor of >79% compared to conventional Fill Factor. High interconnect service lifetime
- By pass diodes allow for maximum performance under shadow condition
- Crack tolerance because of the grid that holds the solar cells
- Longer life than conventional module due to ruggedness of merlin solar panel makes it more tangible
- Superior low light and low sun angle performance
- Maintains module integrity and power performance
- Modules built and tested to UL and IEC Standard
- 12 Years limited and conditional product warranty**
- 25 year limited and conditional warranty for power output**

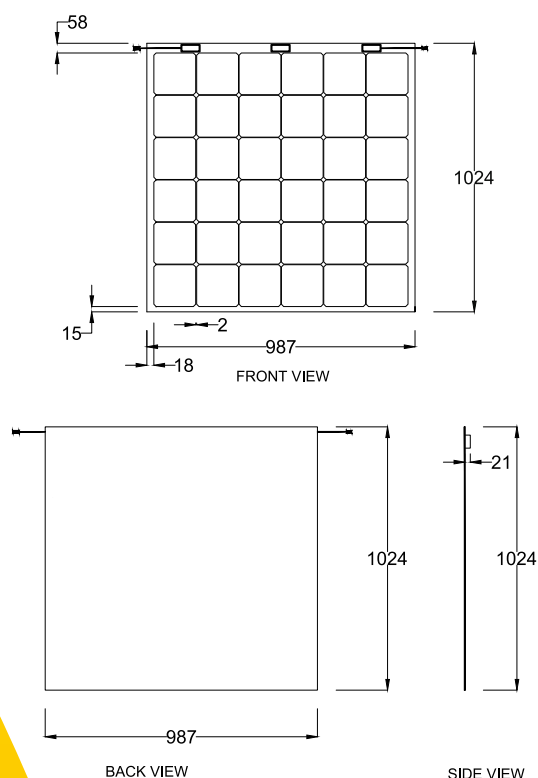
MECHANICAL PROPERTIES

Solar Cells per Module / Arrangement	36 / 6x6
Cell Dimensions	156.75 x 156.75(mm)
Cell Type	Mono-crystalline
Module Dimensions (L x W x H)	1024 x 987 x 21 (mm)
Junction Box	IP 67 rated with 3 by pass diodes
Connector Type	MC4 or MC4 Compatible
Weight	7.9 ± 0.5Kg
Glass (L x W x H)	High Transmissivity tempered ARC Glass 1024 x 987 x 2.0 mm

CERTIFICATION AND WARRANTY

Certifications	IIEC-61215:2005, IEC 61730-1:2004, IEC61730-2:2004, IEC 61701-Ed.2 , IEC 62716-Ed.1:2014, IEC62804-Ed1:2015
Fire Safety Class	Class-A
Limited Product Warranty	12 Years
Limited Power Output Warranty	25 Years

MODULE DIMENSIONS



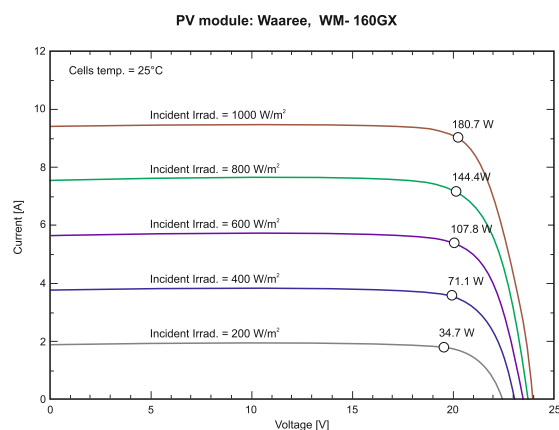
ELECTRICAL PROPERTIES (STC*)

Model Number	WM-160-GX	WM-165-GX	WM-170-GX
Cell Type	MONO	MONO	MONO
Rated Power (Pmax)(Watt)	160	165	170
Cells in Series (Numbers)	36	36	36
Max Peak Voltage (Vmp)(Volt)	18.78	19.11	19.34
Max Peak Current (Imp)(Amp)	8.53	8.64	8.79
Open Circuit Voltage (Voc)(Volt)	22.91	23.1	23.22
Short Circuit Current (Isc)(Amp)	8.85	9.01	9.18
Module Efficiency (%)	15.83	16.32	16.82
Max System Voltage(Vdc)(Volt)	600		
Power Tolerance (%)	3%		
Maximum Series fuse Rating (Amp)	15		
Fill Factor(%)	>79		
Operating Temperature	-40°C to 85°C		

TEMPERATURE COEFFICIENT

Voc	-2.108 mV/K
Isc	4.48 mA/K
FF	-0.1203 %/K
Power	-0.432 %/K

IV Curves PV Module GX 160



For Contact & Support:- www.waaree.com

Designed in USA; Manufactured in India by Waaree Energies Limited

Registered Corporates - 602, Western edge-1;

Off Western Express Highway, Borivali (E); Mumbai-400066.

☐ 022 66 44 44 44, ☐ 022 66 44 44 00;

Toll-Free : 1800 2121 321

☐ E mail: waaree@waaree.com

NOTE: STC STANDS FOR STANDARD TEST CONDITION: 1000W/M² INTENSITY, A.M 1.5, 25°C CELL TEMPERATURE. AT STC, THE ELECTRICAL CHARACTERISTICS IS WITHIN ±10% UNLESS SPECIFIED OTHERWISE . * INDICATED AS PER IEC TESTING DATA, IT MAY BE CHANGED ACCORDINGLY.

**REFER TO WAAREE'S WARRANTY DOCUMENT FOR FURTHER TERMS AND CONDITIONS.

WEL/DS-EN/WM-(180)Wp-36/J17/01