

## WM-110-FX-24L

### WEL MERLIN Flexible MONO

2x12-CELLS - FLEXIBLE MODULE

Waaree Energies introduces the first energy efficient modules in India which are 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 which in turn improves the power performance and long life reliability. WM Flexible series panels are glass-free and made with high quality ETFE Polymer and Waaree merlin mono crystalline solar cells. Due to very light weight it's much easier to fix on roof without any heavy load.



### KEY FEATURES

- Twenty Four (24) cells series connected, highly efficient, Merlin solar cells optimize panel performance
- Multi bus-bar is swapped by ultra thin copper grids
- Higher open circuit voltage
- 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.
- Lifetime high interconnect service
- By pass diodes allow for maximum performance under shadow condition
- Crack tolerance because of the grid that holds the solar cells
- Superior low light and low sun angle performance
- Maintains module integrity and power performance
- Modules built and tested to UL and IEC Standard

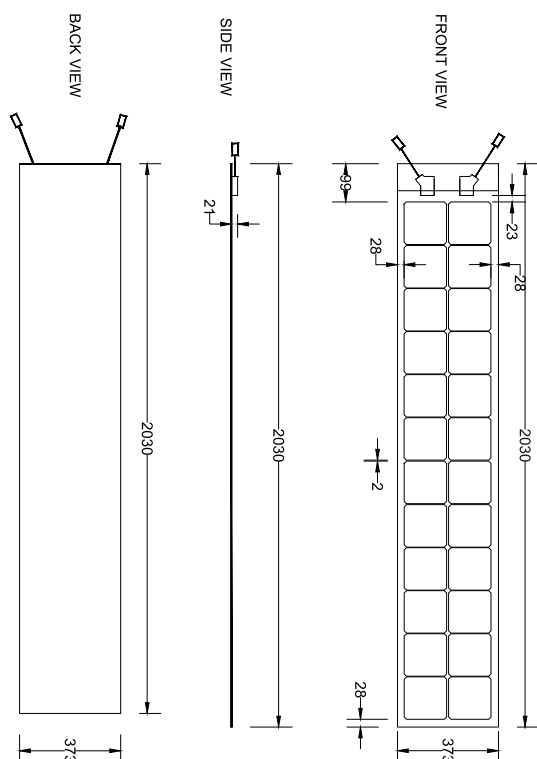
## MECHANICAL PROPERTIES\*

Cells	2x12
Cell Dimensions	156.75 x 156.75 (mm)
Cell Type	Mono-crystalline ( PERC/ NON PERC/BIFACIAL)
Module Dimensions (L x W x H)	2030 X 373 x 21 (mm)
Weight	5.0±0.5 KG
Junction Box	FT-20X
Connector Type	MC4 COMPATIBLE
Superstrate type (e.g. – strengthened glass, tempered glass, etc.)	ETFE Polymer

## CERTIFICATION AND WARRANTY

Certifications	IEC-61215*:2005, IEC 61730*-1:2004, IEC61730*- 2:2004, U.L 1703*
Fire Safety Class	Class-C
Limited Product Warranty	10 Years
Limited Power Output Warranty	25 Years

## MODULE DIMENSIONS



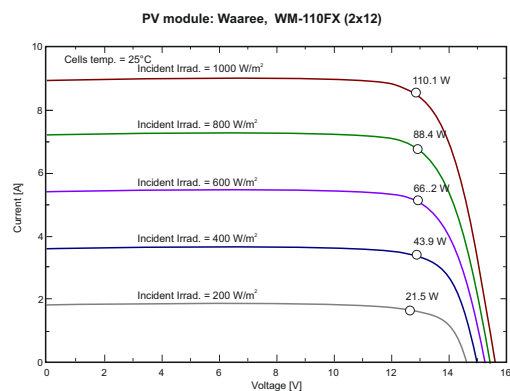
## ELECTRICAL PROPERTIES (STC\*)

Electrical Properties (STC*)			
Model Number	WM-100-FX	WM-105-FX	WM-110-FX
	FX24L	FX24L	FX24L
Cell Type	MONO	MONO	MONO
Rated Power (Pmax) (Watt)	100	105	110
Number in Series (Numbers)	24	24	24
Max Peak Voltage (Vmp) (Volt)	12.15	12.53	12.89
Max Peak Current (Imp) (Amp)	8.24	8.39	8.54
Open Circuit Voltage (Voc) (Volt)	14.98	15.21	15.5
Short Circuit Current (Isc) (Amp)	8.49	8.65	8.81
Module Efficiency (%)	13.21	13.86	14.52
Max System Voltage (V dc) (Volt)	600		
Power Tolerance (%)	+3		
Maximum Series Fuse Rating (Amp)	15		
Fill Factor (%)	>79		
Operating Temperature	-40°C to 85°C		

## TEMPERATURE COEFFICIENT

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

### Characteristic Curves



**For contact & support:- [www.waaree.com](http://www.waaree.com)**

Designed in USA; Manufactured in India by Waaree Energies Limited

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NOTE: STC STANDS FOR STANDARD TEST CONDITION: 1000W/M<sup>2</sup> 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.