



# FX24L PV Module

## **Merlin Technology**

- Industry leading power output with standard cells.
- Lower weight & simpler installations lead to dramatic install cost savings.
- Uncompromising module integrity and performance even under extreme conditions. Higher energy production throughout module lifetime.
- ♦ Dramatically improved aesthetics

# **Key Features**

- ♦ 24 series connected, high efficiency, Merlin solar cells optimize panel performance
- Merlin technology yields higher energy & increased durability
- Low weight, non-penetrating mounting solutions take advantage of the lightweight module characteristics
- Superior low-sun angle and low light performance provide excellent energy yield
- Bypass diodes allow for maximum performance under shade conditions
- Weather resistant package, sealed junction box and protective back sheet provide a long life, reliable and durable package
- Modules are built and tested to UL standard 1703, IEC 61215 & IEC61730
- Manufactured in a highly automated state-of-the-art facility

### **Product Description**

MSTI FX Series PV module line is a bold innovative product designed for a wide range of photovoltaic applications, including commercial and residential rooftops, car ports, metal roofs, and other weight sensitive environments. MSTI is a Silicon Valley based innovator of (PV) cells and modules.

#### **Low Installed System Cost**

MSTI's modules have a flex tolerant lightweight form factor that enables rapid & easy installation as well as low cost system integration with a wide variety of mounting solutions. Modules are optimized for direct bond to surfaces with our peel & stick technology, allowing our customers to increase their profitability and to complete projects that would not be possible with other technologies.

## **High Energy Performance**

MSTI\* is the market leader in high efficiency flex tolerant modules. MSTI's modules are designed for superior performance under all light conditions, including low sun angle, providing excellent energy yield throughout the year.

## **Proven Durability**

MSTI® Modules are built to meet or exceed UL standard 1703, IEC 61215 & IEC 61730. Cells and modules are continually subjected to rigorous environmental and accelerated life cycle testing beyond industry requirements.

www.merlinsolar.com

| Electrical Characteristics (STC)1                      |  |              |       |       |  |  |  |
|--|--|--------------|-------|-------|--|--|--|
| MST PV Module, Model: FX24L                            | Unit                                       | 100          | 105   | 110   |  |  |  |
| Cell Type  |  | Mono         | Mono  | Mono  |  |  |  |
| Number in series                                       |  | 24           | 24    | 24    |  |  |  |
| Rated Power (Pmax)                                     | W  | 100          | 105   | 110   |  |  |  |
| Voltage at Pmax (Vmp)                                  | ٧  | 12.15        | 12.53 | 12.89 |  |  |  |
| Current at Pmax (Imp)                                  | Α  | 8.24         | 8.39  | 8.54  |  |  |  |
| Open-circuit Voltage (Voc)                             | ٧  | 14.98        | 15.21 | 15.50 |  |  |  |
| Short-circuit current (Isc)                            | Α  | 8.49         | 8.65  | 8.81  |  |  |  |
| Active Area Efficiency                                 | %  | 17.06        | 17.91 | 18.76 |  |  |  |
| Temperature Co-efficient of Isc                        | %/°C                                       | 0.05         |       |       |  |  |  |
| Temperature Co-efficient of Voc                        | %/°C                                       | -0.33        |       |       |  |  |  |
| Temperature Co-efficient of Pmax                       | %/°C                                       | -0.42        |       |       |  |  |  |
| Maximum series fuse rating                             | Α  | 15           |       |       |  |  |  |
| Maximum system voltage                                 | VDC  | 600          |       |       |  |  |  |
| Nominal Operating Cell Temperature (NOCT) <sup>2</sup> | °C   | 45 +/- 2     |       |       |  |  |  |
| Operating temperature                                  | °C   | - 40 to + 85 |       |       |  |  |  |
| Termination  | Jbox with PV cable and polarize connectors |              |       |       |  |  |  |

 The power tolerance is -3% / +3% W, at STC. The electrical characteristics are within ± 10% unless otherwise specified.

Mounting on SS metal roof.

## Qualifications

UL Standard 1703 testing: Passed IEC 61215/61730 testing: Passed

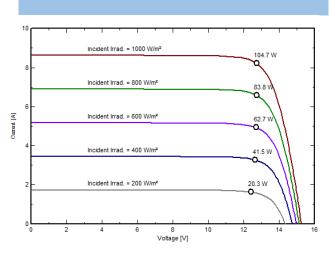
**Limited Warranty** 

Materials and workmanship: 5 years

Power output: 20 years (90% of nominal rated power for years 1 to 10, 80% of nominal rated power for years

11-20)

## IV Curves PV Module FX24L -105



| Module Drawing FX24L              |
|-----------------------------------|
| 2030± 3 MM                        |
| (87)<br>(21)                      |
| 16.5 MM JB  2.5 MM LAM, 2 MM TAPE |
|                                   |
| MERLINS LAR REDEFINE POSSIBLE     |

Designed and manufactured in the USA

| Physical Characteristics Model FX24L |        |       |       |        |  |  |  |
|--------------------------------------|--------|-------|-------|--------|--|--|--|
| Units                                | Length | Width | Depth | Weight |  |  |  |
| mm / kg                              | 2030   | 372   | 21    | 3.1    |  |  |  |
| in / lb                              | 79.92  | 14.65 | 0.83  | 6.9    |  |  |  |

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Specifications are subject to change. Warranty applies only to products installed in USA and Europe. Different warranty terms are available in other geographic regions.

Contact your local reseller for complete terms of the limited warranty.