



## FX Series (FXT-48S) PV Module *TRANSPORTATION*

### Key Features

- ◆ 48 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

### 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

### Product Description

MSTI FX Series PV module line is a bold innovative product designed for a wide range of photovoltaic applications, including transportation, RV, Marine and commercial. 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.

## Electrical Characteristics (STC)<sup>1</sup>

**MST PV Module, Model: FXT-48S Unit 48S**

Cell Type		Mono
Number of cells		48
Rated Power (Pmax) <sup>2</sup>	W	220
Voltage at Pmax (Vmp)	V	25.78
Current at Pmax (Imp)	A	8.54
Open-circuit Voltage (Voc)	V	31.00
Short-circuit current (Isc)	A	8.81
Active Area Efficiency	%	18.77
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 system voltage	VDC	600
Operating temperature	°C	-40 to +85
Termination	J-box with PV cable & polarized connectors	

1. STC standard test conditions: 1000W/m<sup>2</sup> intensity, Air Mass 1.5, 25°C cell temperature.

The power tolerance is +/-5% W at STC. The electrical characteristics are within ± 10% unless otherwise specified.

2. Black backsheet product is 3-5% lower in Pmax.

## Qualifications

**UL Standard 1703 testing:** Passed

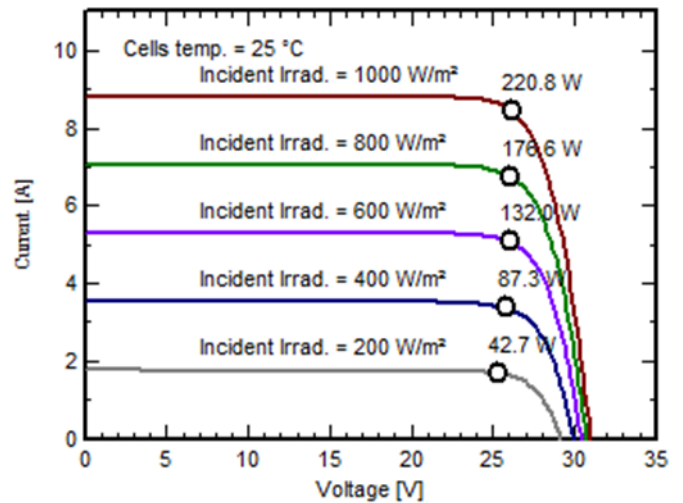
**IEC 61215/61730 testing:** Passed

### Limited Warranty

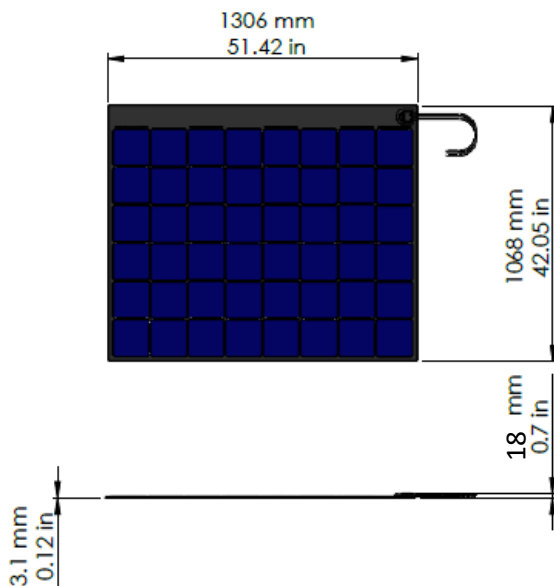
Materials and workmanship: 1 year

Power output: 5 years (90% of nominal rated power for years 1 to 5)

## IV Curves FXT-48S PV Module



## Module Drawing FXT-48S



Merlin Solar Technologies, Inc.  
5891 Rue Ferrari  
San Jose, California, USA 95138

## Physical Characteristics Model FXT-48S

Units	Length	Width	Depth	Weight
mm or kg	1306	1068	18	4.9
in or lb	51.42	42.05	0.70	10.8

**MERLINSOLAR™**  
REDEFINE POSSIBLE

Designed and manufactured in the USA

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 limited warranty.

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810-0101-000 FXT-48S 8x6 Transportation