

MERLINSOLAR™

R E D E F I N E P O S S I B L E



FX36S PV Module

Key Features

- ◆ 36 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
- ◆ 5-year limited warranty against defective materials and workmanship
- ◆ 20-year warranty on power output

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 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

Designed and manufactured in the USA

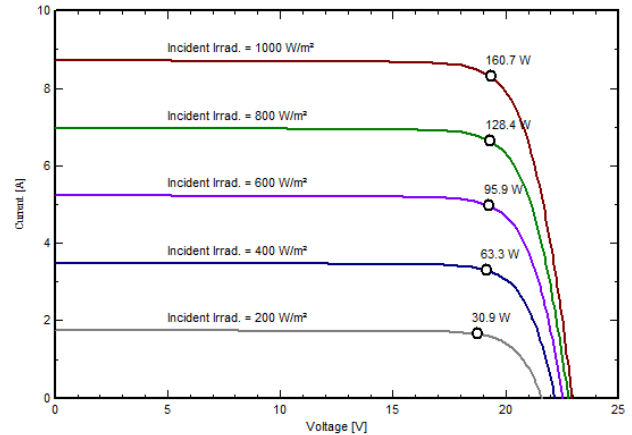
Electrical Characteristics (STC) ¹				
MST PV Module, Model: FX36S	Unit	155	160	165
Cell Type		Mono	Mono	Mono
Number in series		36	36	36
Rated Power (Pmax)	W	155	160	165
Voltage at Pmax (Vmp)	V	18.58	18.92	19.34
Current at Pmax (Imp)	A	8.35	8.46	8.54
Open-circuit Voltage (Voc)	V	22.67	23.01	23.25
Short-circuit current (Isc)	A	8.61	8.72	8.81
Active Area Efficiency	%	17.62	18.19	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	A		15	
Maximum system voltage	VDC		600	
Nominal Operating Cell Temperature (NOCT) ²	°C		45 +/- 2	
Operating temperature	°C		- 40 to + 85	
Termination	Jbox with PV cable and polarize connectors			

- STC standard test conditions: 1000W/m² intensity, Air Mass 1.5, 25°C cell temperature. The power tolerance is **-3% / +3% W**, at STC. The electrical characteristics are within ± 10% unless otherwise specified.
- Mounting on SS metal roof

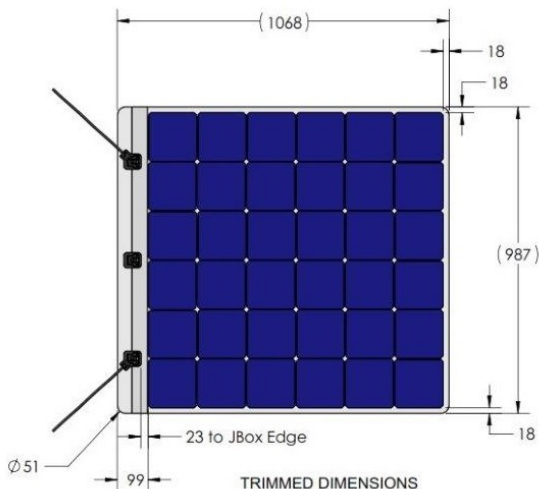
Qualifications

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 to 20)

IV Curves PV Module FX36S—160



Module Drawing FX36S



Physical Characteristics Model FX36S

Units	Length	Width	Depth	Weight
mm / kg	1068	987	21	4.41
in / lb	42.05	38.86	0.83	9.75

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www.merlinsolar.com

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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.

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