

## SP-M72 Series 355 W – 380 W Monocrystalline Photovoltaic Module

SUNPRISM Energy Technology is a pioneer Egyptian manufacturing company specialized in the crystalline photovoltaic (PV) solar power industry since 2005.

Our core business is the manufacturing of photovoltaic modules in a wide range of power levels for off-grid and on-grid applications up to 380 Wp.

Our acquired experience in crystalline PV module manufacturing comes from the heritage of our world-class engineers specialized in this domain since 1992.

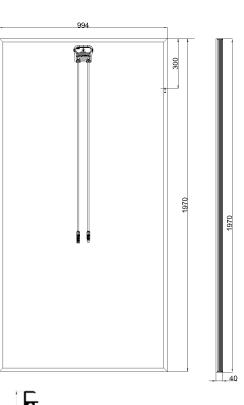
### **SP-M72 Series Features**

- 72 high performance Monocrystalline PERC silicon solar cells made with an efficiency up to 21.8%.
- High durability materials
- Manufactured with compliance to German quality standards and warranted for 10 years.
- Power output guaranteed above 80% for 25 years.



# SP-M72 (355 W - 380 W)

Technical Specifi	cations	SP-M72	355	360	365
Nominal Power	P <sub>max</sub>	[W <sub>P</sub> ]	355	360	365
Module Efficiency		%	18.13	18.38	18.64
Rated current	I <sub>MP</sub>	[A]	9.08	9.15	9.22
Rated Voltage	V <sub>MP</sub>	[V]	39.10	39.36	39.59
Short circuit current	I <sub>SC</sub>	[A]	9.61	9.68	9.71
Open circuit voltage	V <sub>oc</sub>	[V]	46.36	46.72	47.09
<b>Technical Specifi</b>	cations	SP-M72	370	375	380
Nominal Power	P <sub>max</sub>	[W <sub>P</sub> ]	370	375	380
Module Efficiency		%	18.89	19.15	19.40
Rated current	I <sub>MP</sub>	[A]	9.25	9.30	9.37
Rated Voltage	V <sub>MP</sub>	[V]	40.01	40.34	40.57
Short circuit current	I <sub>SC</sub>	[A]	9.75	9.80	9.87
Open circuit voltage	V <sub>oc</sub>	[V]	47.52	47.80	48.02



Electrical data under Standard Test Conditions (STC) :Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25 °C, AM 1.5 +/-3% power measurement tolerance

With assembly tolerance of ± 2 mm ( L & W) ± 0.8 mm Thickness

### **Properties for System Design**

No	minal Operating Cell Temp.	minal Operating Cell Temp.	minal Operating Cell Temp. [°C]	minal Operating Cell Temp. [°C] +
	Temperature coefficient I <sub>sc</sub>	Temperature coefficient I <sub>sc</sub> $\alpha$	Temperature coefficient I <sub>sc</sub> $\alpha$ [%/°C]	Temperature coefficient I $_{sc}$ $\alpha$ [%/°C] +
	Temperature coefficient V <sub>oc</sub>	Temperature coefficient V <sub>oc</sub> $\beta$	Temperature coefficient V <sub>oc</sub> $\beta$ [%/°C]	Temperature coefficient V <sub>oc</sub> $\beta$ [%/°C] -
	Temperature coefficient P <sub>max</sub>	Temperature coefficient P <sub>max</sub>	Temperature coefficient P <sub>max</sub> [%/ <sup>o</sup> C]	Temperature coefficient P <sub>max</sub> [%/ <sup>O</sup> C] -
	Temperature coefficient V <sub>oc</sub>	Temperature coefficient $I_{sc}$ $\alpha$ Temperature coefficient $V_{oc}$ $\beta$	Temperature coefficient Isc $\alpha$ [%/°C]Temperature coefficient Voc $\beta$ [%/°C]	Temperature coefficient $I_{sc}$ $\alpha$ [%/°C] + Temperature coefficient $V_{oc}$ $\beta$ [%/°C] -

Nominal Operating Cell Temperature (NOCT) :Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20 °C, Wind Speed 1m/s

#### **Mechanical Properties**

Front covering	3.2mm AR tempered solar glass	Protection class	Junction box IP68 rated, 1500 VDC
Back covering	Monolayer high grade PET	Cable	$4 \text{ mm}^2$ , length 1 m with MC4 compatible
Solarcell	72 Monocrystalline 6" PERC silicon cells	Weight	21.5 kg
Dimensions	1970 x 994 x 40 mm	HL-test	5400 Pa

Packaging Configuration 25 modules per box, 22 boxes per 40' HC container /10 boxes per 20' container

Over the years SUNPRISM Energy Technology has set high benchmarks with its high quality standards.

Continuous tests guarantee a consistently high level of quality. Every modules undergoes visual, mechanical, and electrical inspections. Each module will be HV-tested and examined by electro luminescence. This is recognizable by means of the original SUNPRISM label, the serial

number, and the SUNPRISM guarantee:

- 10 years product warranty
- 10 years linear performance warranty for a power output of 90%
- 25 years linear performance warranty for a power output of 80%
- Detailed warranty conditions and additional information can be found in our warranty terms
  - Certified according to IEC 61215 and IEC 61730

 $^{\ast}$  SUNPRISM reserves the right to change specifications without prior notice

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