

# eArche

## 105 Watt 24 Cell Polycrystalline Module

100-105 W

**POWER OUTPUT RANGE** 

0-5 W

**POWER TOLERANCE** 

#### **Features**

**Ultra-light:** Through replacement of the glass and optimization of the frame eArche weighs as 70% less than conventional PV panels.

**Aesthetics:** Aesthetically pleasing design with patented materials and sophisticated manufacturing process results in a high-efficiency, attractive panel, with no light pollution and high levels of safety.

**Easy Installation:** eArche can reduce installation cost significantly through the use of re-engineered components, ease of handling and faster installation.

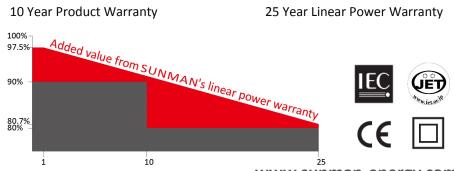
**No-glass:** No fragile glass design lead to PID-free and more safety in handling, transportation, installation and operation.

**Transportation:** eArche's innovative frame and low weight will very significantly reduce the cost of transportation.

**Deployment:** Ultra-light weight and customizable size make eArche the best choice to change the way how solar is deployed in the market and bring added value to special applications.

**Durability:** eArche panels are certified to withstand extreme wind (2400 Pascal) and snow loads (5400 Pascal), while special materials and stringent quality control ensure panel longevity.

### LINEAR PERFORMANCE WARRANTY



www.sunman-energy.com



#### SMA100P-2X12

#### **Electrical Characteristics**

STC	SMA105P-2X12	SMA100P-2X12		
Maximum Power (P <sub>max</sub> )	105	100		
Maximum Power Voltage (V <sub>mp</sub> )	12.7	12.4		
Maximum Power Current (I <sub>mp</sub> )	8.27	8.07		
Open-circuit Voltage (V <sub>oc</sub> )	15.4	15.2		
Short-circuit Current (I <sub>sc</sub> )	8.73	8.52		
Module Efficiency (%)	15.6	14.8		
Operating Temperature ( $^{\circ}$ C)	-40 ℃ to 85 ℃			
Maximum System Voltage	600 V DC (IEC)			
Maximum Series Fuse Rating	20 A			
Application Class	Class A			
Power Tolerance	0/+5 W			
STC: Irradiance 1000W/m <sup>2</sup> . Cell temperature 25 $^{\circ}$ C. AM=1.5.				

STC: Irradiance 1000W/m<sup>2</sup>, Cell temperature 25  $^\circ\!\mathrm{C},\;$  AM=1.5.

NOCT	SMA105P-2X12	SMA100P-2X12
Maximum Power (P <sub>max</sub> )	78	74
Maximum Power Voltage (V <sub>mp</sub> )	11.7	11.5
Maximum Power Current (I <sub>mp</sub> )	6.67	6.44
Open-circuit Voltage (V <sub>oc</sub> )	14.3	14.1
Short-circuit Current (I <sub>sc</sub> )	7.00	6.83

NOCT: Irradiance 800W/m<sup>2</sup>, Ambient temperature 20  $^\circ$ C, Wind speed 1 m/s.

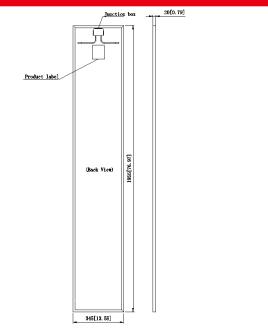
#### **Mechanical Characteristics**

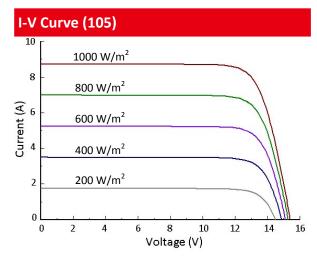
Solar Cell	Polycrystalline silicon (6 inches)	
No. of Cells	24 (2×12)	
Module Dimensions	1955×345×20 mm (77.0×13.6×0.8 inch)	
Weight	3.6 kgs (7.9 lbs)	
Backsheet	White	
Frame	Black Anodized Aluminium Alloy	
J-box	IP 68 rated	
Output Cables	Photovoltaic technology cable 4.0 mm <sup>2</sup> , (+)150 / (-)450 mm	
Connector	MC4 compatible	

#### **Packaging Configuration**

	20' GP	40' HC		
Module per pallet	100	100		
Pieces per container	1000	3600		

**Dimensions** 





Temperature Characteristics		
Nominal Operating Cell Temperature (NOCT)	<b>45±2</b> ℃	
Temperature Coefficient of Pmax	-0.41 %/℃	
Temperature Coefficient of Voc	- <b>0.30 %/℃</b>	
Temperature Coefficient of Isc	<b>0.048 %/℃</b>	

#### **Dealer Information**

**CAUTION:** Read installation manual before using the product.

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