# Standard Series MSP-60

Mariosoalr High Efficiency Polycrystalline Solar Module (1500V) 270–290W



Approved Technology Approved practice for different operating conditions



**Positive Tolerance** Positive tolerance brings more power for free

# Excellent mechanical load resistance: wind loads (2400Pa) & snow loads (5400Pa)



## Guaranteed Reliability Against Harsh Environment

Due to Complicated Quality control system, offer survival solar module in harsh environment



## 1500V System Voltage

**Mechnical Load Endurance** 

Approved IEC1500Vdc system voltage, saving on BoS cost



### LINEAR PERFORMANCE WARRANTY





www.mariosolar.com



# Standard Series MSP-60H Mariosolar High Efficiency Polycrystalline Solar Module (1500V)

ELECTRICAL DATA @ STC*		MSP270-60H	MSP275-60H	MSP280-60H	MSP285-60H	MSP290-60H
Peak Power (Pmax)	(W)	270	275	280	285	290
Maximum Power Voltage (Vmp)	(V)	31.58	31.87	32.15	32.43	32.70
Maximum Power Current (Imp)	(A)	8.55	8.63	8.71	8.79	8.87
Open-circuit Voltage (Voc)	(V)	37.87	38.14	38.42	38.69	38.98
Short-circuit Current (Isc)	(A)	9.13	9.20	9.27	9.35	9.42
Module Efficiency	(%)	16.61	16.92	17.23	17.54	17.84
Operating Temperature				-40°C~+85°C		
Maximum System Voltage				1500V		
Maximum Series Fuse Rating				15A		
Application Class				Class A		
Power Telorance				0~+3%		

\*STC (Standard Test Condition): Irradiance 1000W/ m<sup>2</sup> , Module Temperature 25°C, AM 1.5

#### **ELECTRICAL DATA @ NMOT\***

Peak Power (Pmax)	(W)	200	204	207	211	215
MPP Voltage (Vmp)	(V)	29.15	29.42	29.68	29.93	30.18
MPP Current (Imp)		6.86	6.93	6.99	7.05	7.12
Open Circuit Voltage (Voc)	(V)	35.58	35.83	36.09	36.35	36.66
Short Circuit Current (Isc)	(A)	7.40	7.45	7.51	7.57	7.60

\*Under Nominal Module Operating Temperature (NMOT), Irradiance of 800W/ m², Spectrum AM 1.5, Ambient Temperature 20°C, Wind Speed 1m/s

#### **TEMPERATURE CHARACTERISTICS**

Temperature coefficient of Pmax	-0.41%/°C
Temperature coefficient of Voc	-0.33%/°C
Temperature coefficient of Isc	0.05%/°C
NMOT	43±3℃

#### **MECHNICAL DATA**

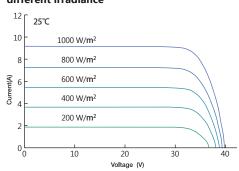
Cell Type	Poly-Crystalline, 6' inch		
Cell Arrangement	60pcs (6×10)		
Dimension (L×W×H)	1640×991×35mm		
Weight	18.2kg		
Front Cover	3.2mm Tempered Glass		
Frame	Anodized Aluminium Alloy		
Junction Box	IP67, 3 Bypass Diodes		
Cable Type	4mm <sup>2</sup>		
Length of Cable	1000mm		
Connector	PV Connector		

#### **PACKING MANNER**

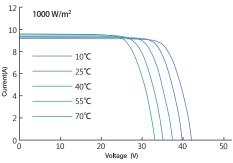
Packing Type	40HQ
Piece/Pallet	30
Pallet/Container	28
Piece/Container	840

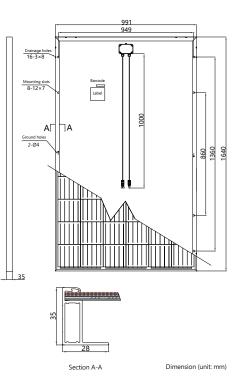
\*The specification and key features described in this datasheet may deviate slightly and are not guaranteed. Due to ongoing innovation, R&D enhancement, Mariosolar. Reserves the right to make any adjustment to the information described herein at any time without notice. Please always obtain the most recent version of the datasheet which shall be duly incorporated into the binding contract made by the parties governing all transactions related to the purchase and sale of the products described herein.

# Current-Voltage Curve under different irradiance









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