

# MARS GSD6G72M [440-460W]

Bifacial Dual Glass 9BB Half-cut Mono Perc

IEC 61215 / IEC 61730 / UL 61730

**IS09001: 2015:** Quality Management System

IS014001:2015: Environment Management System

ISO45001:2018: Occupational Health And Safety Management System



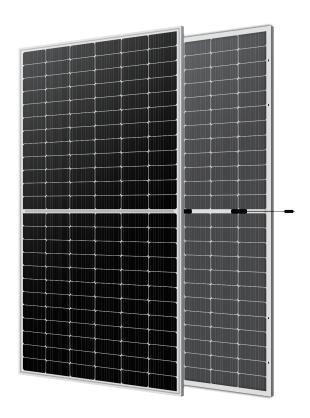












## **KEY FEATURES**



#### 9BB Half-cut Cell Technology

New circuit design, lower internal current, lower Rs loss dopped wafer



#### Significantly Lower The Risk Of Hot Spot

Special circuit design with much lower hot spot temperature



#### **Double Power Output**

For higher power output, backside power output can be increasess 5-25%



#### **PID Resistance**

Excellent Anti-PID performance guarantee via optimized mass-production process and materials control



#### **Enhanced Mechanical Load**

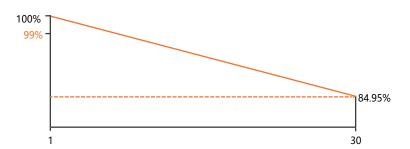
Certified to withstand: wind load (2400 Pascal) and snowload (5400 Pascal)

# **Guaranteed Power Performance**

**25** Years Product Warranty

**30** Years Linear Power Warranty

**0.45%** Annual Degradation Over 30 Years



As different markets have different certification requirements, please consult our G-Star sales group to obtain the corresponding certification for the local market. If any special requirements are needed for the specific installing environment, pleae feel free to contact G-star technical support department anytime.

info@gstar-solar.com \*Version No.: GS-20230701

## GSD6G72M

# 440-460W

Bifacial Dual Glass 9BB Half-cut Mono Perc

#### Weight

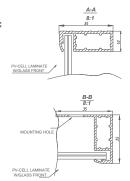
23.5 kg

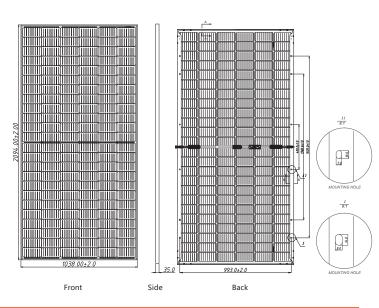
#### **Dimensions**

2094\*1038\*35mm

#### **Packaging**

31pcs/pallet,715pcs/ 40'HQ Container 682pcs/ 40'HQ Container(USA)





OPERATING CONDITIONS		MECHANICAL CHARACTERISTICS		
Operating Temperature	-40°C~+85°C	Cell Type	Monocrystalline 166*83mm	
Maximum System Voltage	1500V/DC(IEC)	No. Of Cells	144 pcs in series (6x24)	
Maximum Series Fuse Rating	25A	Front Glass	2.0mm AR Coating Semi-tempered Glass	
Power Tolerance	0~+3%	Back Glass	2.0mm Glazed Semi-tempered Glass	
Temperature Coefficients Of Pmax	-0.36%/°C	Frame	Anodized Aluminium Alloy,silver or black	
Temperature Coefficients Of Voc	-0.26%/°C	Junction Box	IP68 ,3Bypass Diodes	
Temperature Coefficients Of Isc	0.043%/°C	Output Cables	300mm in legth or Customized Length	
Nominal Module Operating Temperature(NMOT)	43±2°C	Connectors	MC4/MC4-EVO2	
*Under STC :BACKside Output Ration =Pmax(rear)/Pmax(front)	70%±5%	Mechanical Load	5400Pa(Front)/2400Pa(Back)	

## **ELECTRICAL PARAMETERS AT STC & NMOT**

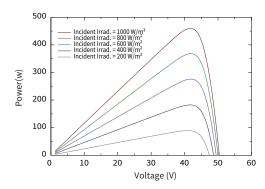
Module Type	GSD6G72	GSD6G72M-440WT		GSD6G72M-445WT		GSD6G72M-450WT		GSD6G72M-455WT		GSD6G72M-460WT	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	
Maximum Power(Pmax)	440Wp	327Wp	445Wp	330Wp	450Wp	334Wp	455Wp	338Wp	460Wp	341Wp	
Maximum Power Voltage (Vmp)	41.60V	38.90V	41.80V	39.10V	42.00V	39.30V	42.20V	39.40V	42.40V	39.60V	
Maximum Power Current (lmp)	10.58A	8.41A	10.65A	8.47A	10.72A	8.52A	10.79A	8.57A	10.86A	8.62A	
Open-Circuit Voltage (Voc)	50.00V	46.8V	50.20V	46.90V	50.40V	47.10V	50.60V	47.30V	50.80V	47.50V	
Short-Circuit Current (lsc)	11.22A	9.04A	11.29A	9.10A	11.36A	9.16A	11.43A	9.21A	11.50A	9.27A	
Module Efficiency STC (%)	20.24	%	20.47	%	20	.70%	20.93	3%	21.	16%	

## **BIFACIAL OUTPUT-REARSIDE POWER GAIN**

5%	Maximum Power(Pmax)	462Wp	467Wp	473Wp	478Wp	483Wp
	Module Efficiency STC (%)	21.26%	21.50%	21.74%	21.98%	22.22%
15%	Maximum Power(Pmax)	506Wp	512Wp	518Wp	523Wp	529Wp
	Module Efficiency STC (%)	23.28%	23.54%	23.81%	24.07%	24.34%
25%	Maximum Power(Pmax)	550Wp	556Wp	563Wp	569Wp	575Wp
	Module Efficiency STC (%)	25.30%	25.59 %	25.88%	26.17%	26.45%

<sup>\*</sup>Bifacial Gain: The additional gain from the back side compared to the power of the front side at the standard test condition. It depends on mounting (structure, height, tit angle etc.) and albedo of the ground.

# **IV-CURVE**



14 12 Incident Irrad. = 1000 W/m<sup>2</sup> 10 Incident Irrad. = 800 W/m<sup>2</sup> 8 Incident Irrad. = 600 W/m<sup>2</sup> 6 Incident Irrad. = 400 W/m<sup>2</sup> Incident Irrad. = 200 W/m<sup>2</sup> 2 0 10 20 30 50 Voltage (V)



E-mail:info@gstar-solar.com Website: www.gstarsolar.com



\*STC: Irradiance 1000W/m² NMOT:lrradiance 800W/m²



Cell Temperature 25°C Ambient Temperature 20°C



AM=1.5

