

HORAY

Solar Creek

80-90 Watt

MONO-FACIAL MODULE

IEC61215: 2021

TUV Rheinland Standard

Lloyd'S Ariel Re
Solar Performance Insurance

ISO9001: 2015

Quality Management System

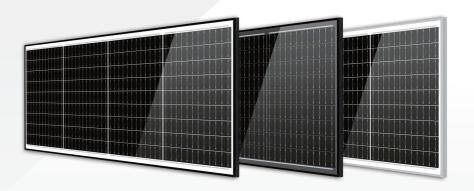
ISO14001:

Environmental Management System

CE: Europe Standard

Inmetro Certificate

ETL Certificate



KEY FEATURES



5BB/MBB

More uniform current collection capability, reducing the current heat loss of the internal cells.



Low Light Features

Higher performance under low light environment.



Higher Output Power

The output power of 36 half-cells Monocrystalline modules is up to 90W.



PID Protection

Ensure the attenuation probability caused by PID phenomenon is minimized.



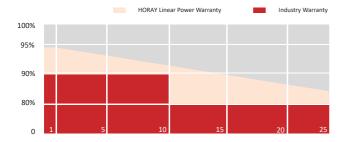
Harsh Environmental Adaptability

Strict salt spray and ammonia corrosion test by the third party.



Load Capacity

Mechanical load tests including wind load 2400 Pa and snow load 5400 Pa.























HEADQUARTER: HORAY SOLAR CO., LTD.

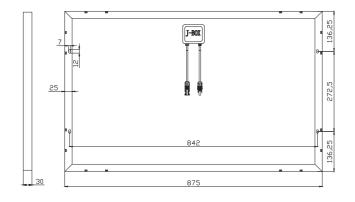
GLOBAL MARKETING AND SERVICE: HORAY SOLAR GMBH

■ sales@horaysolar.com • www.horaysolar.com • +86-510 83580688 • NO.30-5, East Yanxin Road, Huishan District, Wuxi 214177 Jiangsu P.R China

info@horaysolar.comwww.horaysolar.comRobert-Bosch-Str. 29,Langen,Frankfurt am Main, Germany



MECHANICAL DIAGRAMS



SPECIFICATIONS

Weight	5.7kg
Dimension	545mm*875mm*30mm
Cell Dimension	210*52.5mm
Cell Amount	4*9 pcs
Maximum System Voltage	1500V
Junction Box	IP67
Frame	Aluminum Alloy
Cable	Length can be customized
Connector	MC4 compatible
Application Level	Class A

ELECTRICAL PARAMETERS AT STC

Module Type	HS80-MHG	HS85-MHG	HS90-MHG
Power	80W	85W	90W
Open Circuit Voltage	25.60V	25.92V	26.04V
Short Circuit Current	3.95A	4.17A	4.40A
Maximum Power Voltage	21.50V	21.60V	21.70V
Maximum Power Current	3.72A	3.94A	4.15A
Module Efficiency	16.78%	17.82%	18.87%

^{*} Under Standard Test Conditions (STC) of irradiance of 1000 W/ \mathbb{M}^2 , spectrum AM 1.5 and cell temperature of 25°C.

ELECTRICAL PARAMETERS AT NMOT

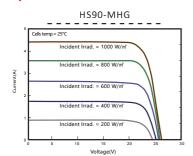
Power	60W	64W	68W
Open Circuit Voltage	24.16V	24.38V	24.58V
Short Circuit Current	3.16A	3.34A	3.52A
Maximum Power Voltage	20.13V	20.32V	20.48V
Maximum Power Current	2.98A	3.15A	3.32A
Module Efficiency	12.58%	13.42%	14.26%

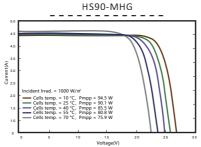
^{*} Under Nominal Module Operating Temperature (NMOT), irradiance of 800 W/ m², spectrum AM 1.5, ambient temperature 20°C, wind speed 1 m/s.

TEMPERATURE CHARACTERISTICS

NMOT	45±2°C	Temp Coefficient of ISC	+0.05%/°C
Temp Coefficient of VOC	-0.28%/°C	Temp Coefficient of Pmax	-0.34%/°C

IV CHARACTERISTICS





MAXIMUM RATING

Power selection	0~+5W
Measuring uncertainty of Pm	0~±3%
Operating Temperature	-40°C~+85°C
Wind Load/Snow Load	2400pa/5400pa
Fuse Current	15A



25 YEARS Power Warranty