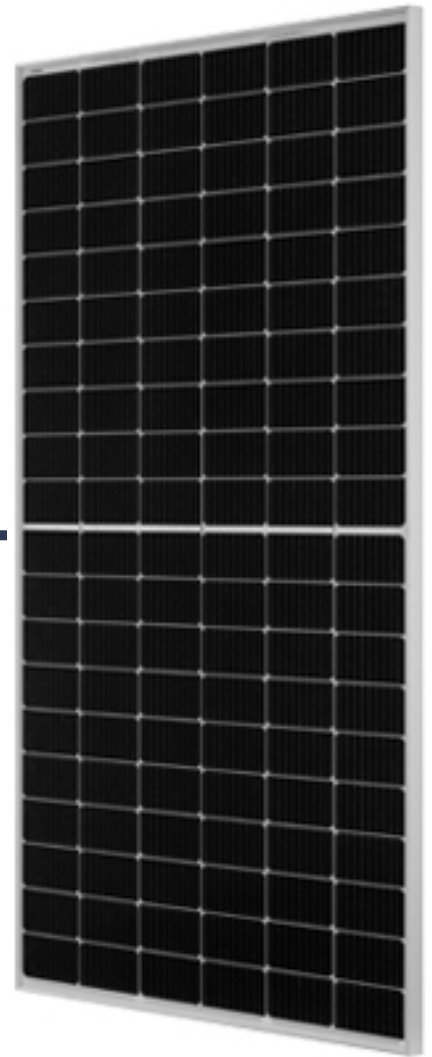


# 470W MBB Half-Cell Module

## JAM72S20 445-470/MR Series



### Introduction

Assembled with multi-busbar PERC cells, the half cell configuration of the modules offers the advantages of higher power output, better temperature-dependent performance, reduced shading effect on the energy generation, lower risk of hot spot, as well as enhanced tolerance for mechanical loading.



Higher output power



Lower LCOE



Less shading and lower resistive loss

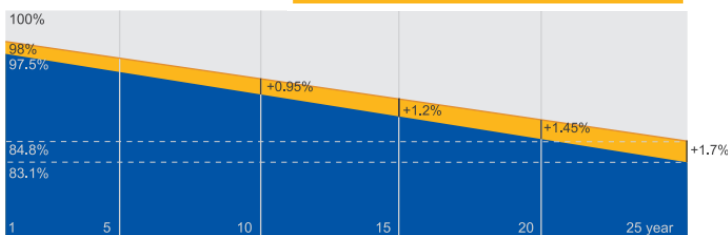


Better mechanical loading tolerance

### Superior Warranty

- 12-year product warranty
- 25-year linear power output warranty

0.55% Annual Degradation  
Over 25 years



■ New linear power warranty ■ Standard module linear power warranty

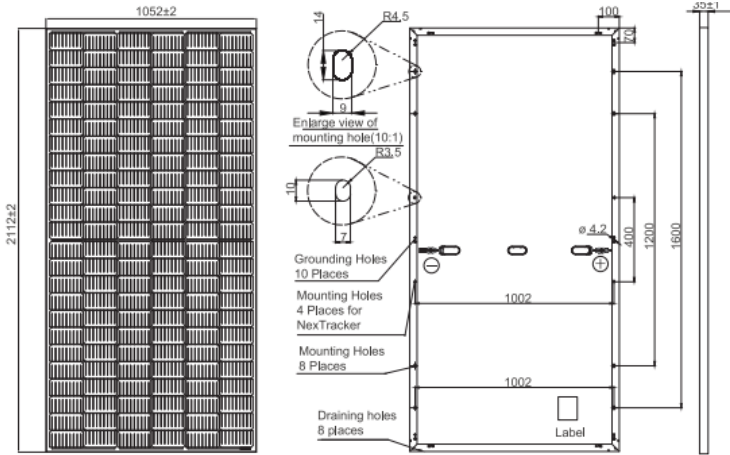
### Comprehensive Certificates

- IEC 61215, IEC 61730, UL 61215, UL 61730
- ISO 9001: 2015 Quality managementsystems
- ISO 14001: 2015 Environmental management systems
- ISO 45001: 2018 Occupational health and safety management systems
- IEC TS 62941: 2016 Terrestrial photovoltaic (PV) modules- Guidelines for increased confidencePV module design qualification and type approval



# JAM72S20 445-470/MR Series

## Mechanical Diagrams



Remark: Customized frame color and cable length available upon request

## Specifications

Cell	Mono
Weight	24.5kg±3%
Dimensions	2112±2mmx1052±2mmx35±1mm
Cable Cross Section Size	4mm <sup>2</sup> (IEC), 12 AWG (UL)
No. of cell	144(6x24)
Junction Box	IP68, 3 diodes
Connector	QC 4.10(1000V) QC 4.10-35 (1500V)
Cable Length (Including Connector)	Portrait:300mm(+)/400mm(-); Landscape:1200mm(+)/1200mm(-)
Packaging Configuration	31 pcs/Pallet 682pcs/40ft Container

## ELECTRICAL PARAMETERS AT STC

TYPE	JAM72S20 -445/MR	JAM72S20 -450/MR	JAM72S20 -455/MR	JAM72S20 -460/MR	JAM72S20 -465/MR	JAM72S20 -470/MR
Rated Maximum Power -Pmp (W)	445	450	455	460	465	470
Open Circuit Voltage -Voc (V)	49.56	49.70	49.85	50.01	50.15	50.31
Maximum Power Voltage -Vmp (V)	41.21	41.52	41.82	42.13	42.43	42.69
Short Circuit Current -Isc (A)	11.32	11.36	11.41	11.45	11.49	11.53
Maximum Power Current -Imp (A)	10.80	10.84	10.88	10.92	10.96	11.01
Module Efficiency (%)	20.0	20.3	20.5	20.7	20.9	21.2
Power Tolerance	0~+5W					
Isc Temperature Coefficient	+0.044%/°C					
Voc Temperature Coefficient	-0.272%/°C					
Pmax Temperature Coefficient	-0.350%/°C					
STC	Irradiance 1000W/m <sup>2</sup> , cell temperature 25°C, AM1.5G					

Remark: Electrical data in this catalog do not refer to a single module and they are not part of the offer. They only serve for comparison among different module types.

## ELECTRICAL PARAMETERS AT NOCT

TYPE	JAM72S20 -445/MR	JAM72S20 -450/MR	JAM72S20 -455/MR	JAM72S20 -460/MR	JAM72S20 -465/MR	JAM72S20 -470/MR
Rated Max Power(Pmax) [W]	336	340	344	348	352	355
Open Circuit Voltage(Voc) [V]	46.65	46.90	47.15	47.38	47.61	47.84
Max Power Voltage(Vmp) [V]	38.95	39.19	39.44	39.68	39.90	40.10
Short Circuit Current(Isc) [A]	9.20	9.25	9.29	9.33	9.38	9.42
Max Power Current(Imp) [A]	8.64	8.68	8.72	8.76	8.81	8.86
NOCT	Irradiance 800W/m <sup>2</sup> , ambient temperature 20°C, wind speed 1m/s, AM1.5G					

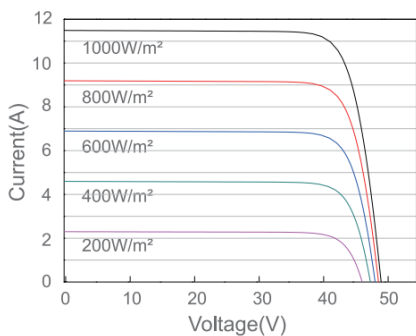
## OPERATING CONDITIONS

Maximum System Voltage	1000V/1500V DC(IEC)
Operating Temperature	-40°C~-85°C
Maximum Series Fuse	20A
Maximum Static Load, Front	5400Pa
Maximum Static Load, Back	2400Pa
NOCT	45±2°C
Safety Class	Class II
Fire Performance	UL Type 1

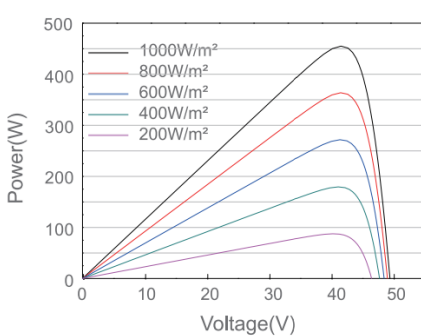
\*For NextTracker installations, Maximum Static Load, Front is 1800Pa while Maximum Static Load, Back is 1800Pa.

## CHARACTERISTICS

Current-Voltage Curve JAM72S20-455/MR



Power-Voltage Curve JAM72S20-455/MR



Current-Voltage Curve JAM72S20-455/MR

