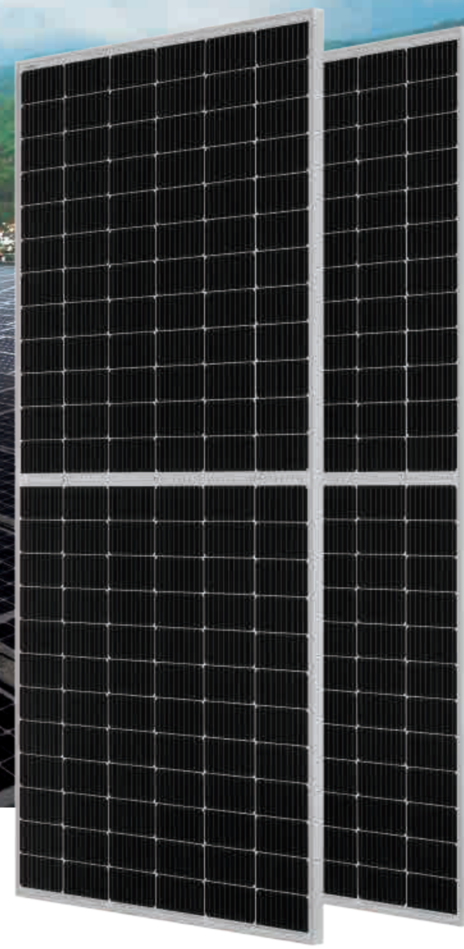
Harvest the Sunshine



Mono

465W MBB Bifacial Mono PERC Half-cell Double Glass Module

JAM72D20 440-465/MB/1500V Series

Introduction

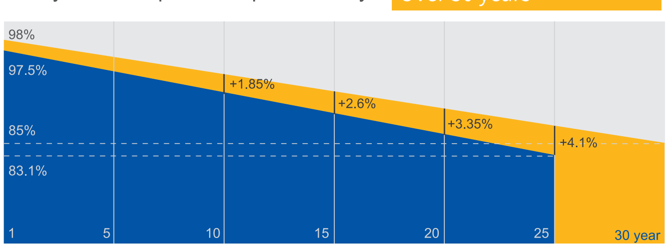
Assembled with MBB bifacial PERCIUM cells and half-cell configuration, these double glass modules have the capability of converting the incident light from the rear side together with the front side into electricity, providing higher output power, lower temperature coefficient, less shading loss, as well as enhanced tolerance for mechanical loading.

- Higher output power
- More reliable, more stable power generation
- Less shading effect
- Lower temperature coefficient

Superior Warranty

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

0.45% Annual Degradation Over 30 years



- Bifacial double glass module linear power warranty
- Standard module linear power warranty

Comprehensive Certificates

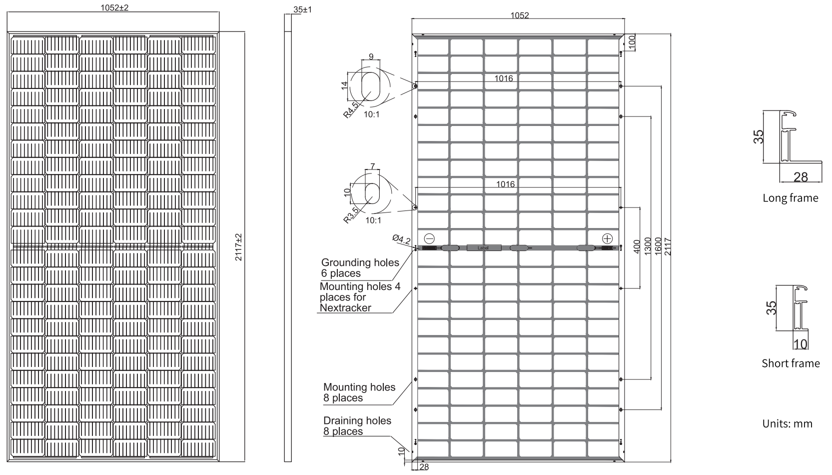
- IEC 61215, IEC 61730
- ISO 9001: 2015 Quality management systems
- ISO 14001: 2015 Environmental management systems
- ISO 45001: 2018 Occupational health and safety management systems

JA SOLAR

JA SOLAR

JAM72D20 440-465/MB/1500V Series

MECHANICAL DIAGRAMS



Remark: customized frame color and cable length available upon request

SPECIFICATIONS

Cell	Mono
Weight	27.3kg±3%
Dimensions	2117±2mm×1052±2mm×35±1mm
Cable Cross Section Size	4mm² (IEC)
No. of cells	144(6×24)
Junction Box	IP68, 3 diodes
Connector	Genuine MC4-EVO2 QC4.10-35/45
Cable Length (Including Connector)	Portrait:300mm(+)/400mm(-); Landscape:1200mm(+)/1200mm(-)
Front Glass/Back Glass	2.0mm/2.0mm
Country of Manufacturer	China/Vietnam

ELECTRICAL PARAMETERS AT STC

TYPE	JAM72D20 -440/MB/1500V	JAM72D20 -445/MB/1500V	JAM72D20 -450/MB/1500V	JAM72D20 -455/MB/1500V	JAM72D20 -460/MB/1500V	JAM72D20 -465/MB/1500V
Rated Maximum Power(Pmax) [W]	440	445	450	455	460	465
Open Circuit Voltage(Voc) [V]	49.30	49.45	49.61	49.75	49.91	50.05
Maximum Power Voltage(Vmp) [V]	40.60	40.91	41.21	41.52	41.79	42.09
Short Circuit Current(Isc) [A]	11.33	11.38	11.42	11.46	11.50	11.55
Maximum Power Current(Imp) [A]	10.84	10.88	10.92	10.96	11.01	11.05
Module Efficiency [%]	19.8	20.0	20.2	20.4	20.7	20.9
Power Tolerance	0~+5W					
Temperature Coefficient of Isc(α_Isc)	+0.044%/℃					
Temperature Coefficient of Voc(β_Voc)	-0.272%/℃					
Temperature Coefficient of Pmax(γ_Pmp)	-0.350%/℃					
STC	Irradiance 1000W/m², cell temperature 25℃, 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.
Measurement tolerance at STC: Pmax ±3 %, Voc ±3% and Isc ±4%.

ELECTRICAL CHARACTERISTICS WITH 10% SOLAR IRRADIATION RATIO

TYPE	JAM72D20 -440/MB	JAM72D20 -445/MB	JAM72D20 -450/MB	JAM72D20 -455/MB	JAM72D20 -460/MB	JAM72D20 -465/MB
Rated Max Power(Pmax) [W]	471	476	482	487	492	498
Open Circuit Voltage(Voc) [V]	49.40	49.55	49.71	49.85	50.01	50.15
Max Power Voltage(Vmp) [V]	40.59	40.90	41.21	41.51	41.78	42.08
Short Circuit Current(Isc) [A]	12.12	12.18	12.22	12.26	12.31	12.36
Max Power Current(Imp) [A]	11.60	11.64	11.68	11.73	11.78	11.82
Irradiation Ratio (rear/front)	10%					

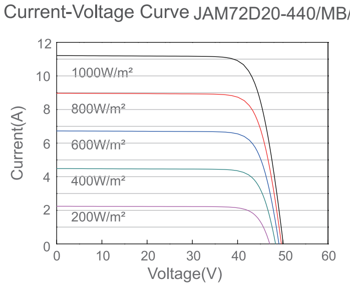
*For NexTracker installations static loading performance: front load measure 2400Pa, while back load measures 2400Pa.
**Bifaciality=Pmax,rear/Rated Pmax,front

OPERATING CONDITIONS

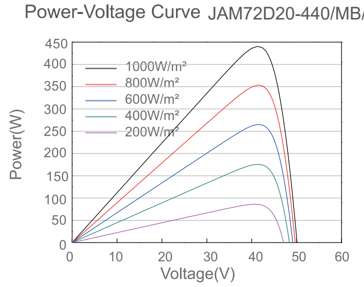
Maximum System Voltage	1500V DC
Operating Temperature	-40℃~+85℃
Maximum Series Fuse	25A
Maximum Static Load,Front* Maximum Static Load,Back*	3600Pa, 1.5 1600Pa, 1.5
NOCT	45±2℃
Bifaciality**	70%±10%

CHARACTERISTICS

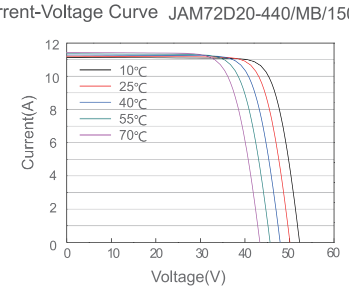
Current-Voltage Curve JAM72D20-440/MB/1500V



Power-Voltage Curve JAM72D20-440/MB/1500V



Current-Voltage Curve JAM72D20-440/MB/1500V



Premium Cells, Premium Modules