

Mono

420W MBB Half-Cell Module

JAM72S10 400-420/MR/1500V 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



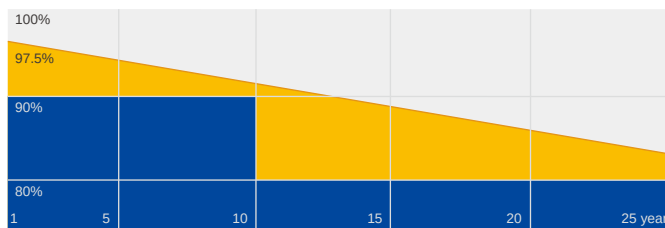
Less shading and lower resistive loss



Better mechanical loading tolerance

Superior Warranty

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



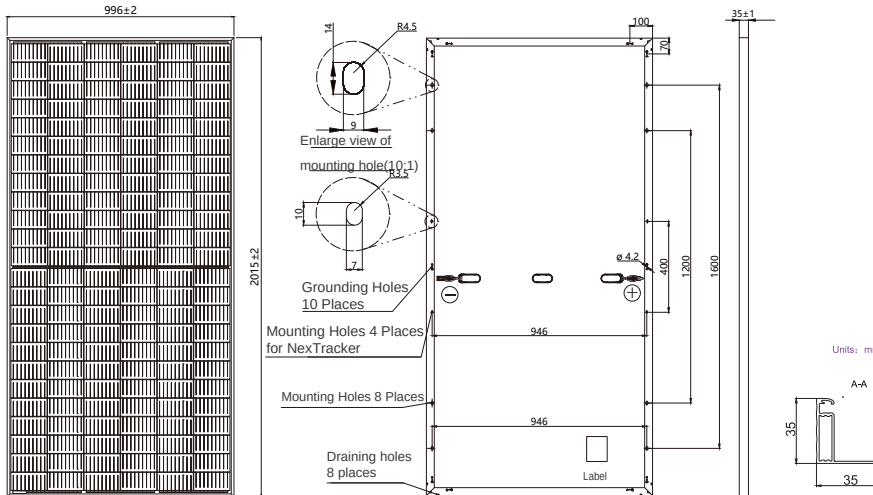
■ JA Linear Power Warranty ■ Industry Warranty

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



MECHANICAL DIAGRAMS



Remark: customized frame color and cable length available upon request

SPECIFICATIONS

Cell	Mono
Weight	22.4kg±3%
Dimensions	2015±2mm×996±2mm×35±1mm
Cable Cross Section Size	4mm ²
No. of cells	144 (6×24)
Cable Length (Including Connector)	Portrait:300mm(+)/400mm(-); Landscape:1200mm(+)/1200mm(-)
Connector	Stäubli MC4-EVO2/ MC4-EVO2A QC Solar QC 4.10-35/ QC 4.10-35I
Country of Manufacturer	China/Vietnam

ELECTRICAL PARAMETERS AT STC

TYPE	JAM72S10 -400/MR/1500V	JAM72S10 -405/MR/1500V	JAM72S10 -410/MR/1500V	JAM72S10 -415/MR/1500V	JAM72S10 -420/MR/1500V
Rated Maximum Power(Pmax) [W]	400	405	410	415	420
Open Circuit Voltage(Voc) [V]	49.58	49.86	50.12	50.41	50.70
Maximum Power Voltage(Vmp) [V]	41.33	41.60	41.88	42.18	42.47
Short Circuit Current(Isc) [A]	10.33	10.39	10.45	10.51	10.56
Maximum Power Current(Imp) [A]	9.68	9.74	9.79	9.84	9.89
Module Efficiency [%]	19.9	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/m ² , 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.

*For NexTracker installations static loading performance: front load measures 2400Pa, while back load measures 2400Pa.

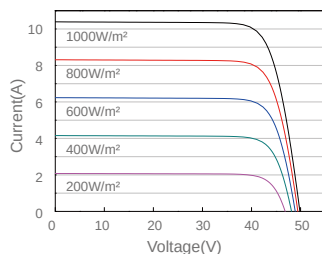
Measurement tolerance at STC: $P_{max} \pm 3\%$, $V_{oc} \pm 2\%$ and $I_{sc} \pm 4\%$.

ELECTRICAL PARAMETERS AT NOCT

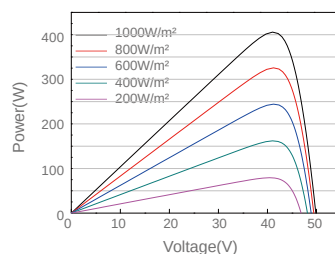
TYPE	JAM72S10 -400/MR/1500V	JAM72S10 -405/MR/1500V	JAM72S10 -410/MR/1500V	JAM72S10 -415/MR/1500V	JAM72S10 -420/MR/1500V	Maximum System Voltage	1500V DC(IEC)
Rated Max Power(Pmax) [W]	302	306	310	314	318	Operating Temperature	-40℃~+85℃
Open Circuit Voltage(Voc) [V]	46.41	46.66	46.91	47.16	47.38	Maximum Series Fuse	20A
Max Power Voltage(Vmp) [V]	38.65	38.90	39.16	39.41	39.60	Maximum Static Load,Front*	3600Pa, 1.5
Short Circuit Current(Isc) [A]	8.25	8.31	8.36	8.41	8.46	Maximum Static Load,Back*	1600Pa, 1.5
Max Power Current(Imp) [A]	7.81	7.87	7.92	7.97	8.03	Safety Class	Class II
NOCT	Irradiance 800W/m², ambient temperature 20℃, wind speed 1m/s. AM1.5G					Fire Class	Class C

CHARACTERISTICS

Current-Voltage Curve JAM72S10-405/MR/1500V



Power-Voltage Curve JAM72S10-405/MR/1500V



Current-Voltage Curve JAM72S10-405/MR/1500V

