

415W MBB

MR
Series



Higher output power



Lower LCOE



Better mechanical loading tolerance



Less shading and lower resistive loss



12-year product warranty



25-year linear power output warranty

Half-cell Module JAM54S31 MR 390-415

Comprehensive Certificates

- IEC 61215, IEC 61730, UL 61215, UL 61730
- ISO 9001: 2015 Quality management systems
- ISO 14001: 2015 Environmental management systems
- ISO 45001: 2018 Occupational health and safety management systems
- IEC 62941: 2019 Terrestrial photovoltaic (PV) modules - Quality system for PV module manufacturing

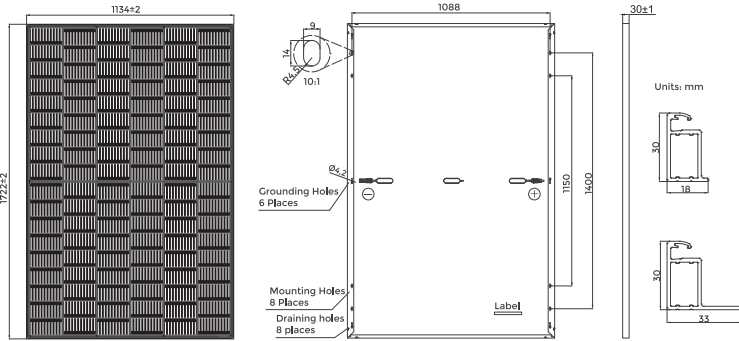




415W

390-415 **MR** Series

JAM54S31



Remark: customized frame color and cable length available upon request

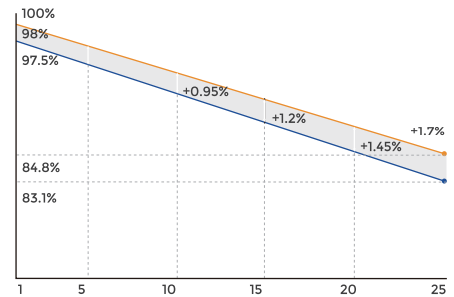
Cell	Mono
Weight	19.5kg
Dimensions	1722±2mm×1134±2mm×30±1mm
Cable Cross Section Size	4mm ² (IEC), 12 AWG(UL)
No. of cells	108(6x18)
Junction Box	IP68, 3 diodes
Connector	QC 4.10-351/ MC4-EVO2A
Cable Length (Including Connector)	Portrait: 300mm(+)/400mm(-); Landscape: 1100mm(+)/1100mm(-)
Front Glass	2.8mm
Packaging Configuration	36pcs/Pallet, 936pcs/40ft Container

ELECTRICAL PARAMETERS AT STC

TYPE	JAM54S31 -390/MR	JAM54S31 -395/MR	JAM54S31 -400/MR	JAM54S31 -405/MR	JAM54S31 -410/MR	JAM54S31 -415/MR
Rated Maximum Power(Pmax) [W]	390	395	400	405	410	415
Open Circuit Voltage(Voc) [V]	36.85	36.98	37.07	37.23	37.32	37.45
Maximum Power Voltage(Vmp) [V]	30.64	30.84	31.01	31.21	31.45	31.61
Short Circuit Current(Isc) [A]	13.61	13.70	13.79	13.87	13.95	14.02
Maximum Power Current(Imp) [A]	12.73	12.81	12.90	12.98	13.04	13.13
Module Efficiency [%]	20.0	20.2	20.5	20.7	21.0	21.3
Power Tolerance	0~+5W					
Temperature Coefficient of Isc(α _{Isc})	+0.045% / C					
Temperature Coefficient of Voc(β _{Voc})	-0.275% / C					
Temperature Coefficient of Pmax(γ _{Pmp})	-0.350% / C					
STC	Irradiance 1000W/m ² , cell temperature 25 C, AM1.5G					

Superior Warranty

0.55% Annual Degradation Over 25 years



- New linear power warranty
- Standard module linear power warranty

ELECTRICAL PARAMETERS AT NOCT

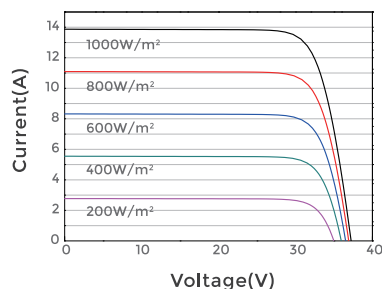
TYPE	JAM54S31 -390/MR	JAM54S31 -395/MR	JAM54S31 -400/MR	JAM54S31 -405/MR	JAM54S31 -410/MR	JAM54S31 -415/MR
Rated Max Power(Pmax) [W]	294	298	302	306	310	314
Open Circuit Voltage(Voc) [V]	34.62	34.75	34.88	35.12	35.23	35.37
Max Power Voltage(Vmp) [V]	28.87	29.08	29.26	29.47	29.72	29.89
Short Circuit Current(Isc) [A]	10.89	10.96	11.03	11.10	11.16	11.22
Max Power Current(Imp) [A]	10.18	10.25	10.32	10.38	10.43	10.50
NOCT	Irradiance 800W/m ² , ambient temperature 20 C, wind speed 1m/s, AM1.5G					

OPERATING CONDITIONS

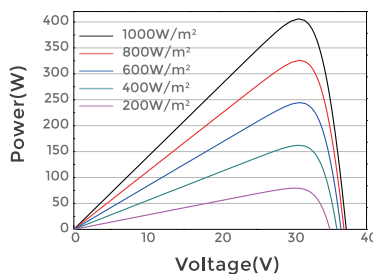
Maximum System Voltage	1000V/1500V DC
Operating Temperature	-40 C ~+85 C
Maximum Series Fuse Rating	25A
Maximum Static Load, Front*	5400Pa(112lb/ft ²)
Maximum Static Load, Back*	2400Pa(50lb/ft ²)
NOCT	45±2 C
Safety Class	Class II
Fire Performance	UL Type 1

CHARACTERISTICS

Current-Voltage Curve **JAM54S31-405/MR**



Power-Voltage Curve **JAM54S31-405/MR**



Current-Voltage Curve **JAM54S31-405/MR**

