

DEEP BLUE 3.0

Mono

555W MBB Half-cell Module
JAM72S30 530-555/MR Series

Introduction

Assembled with 11BB 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

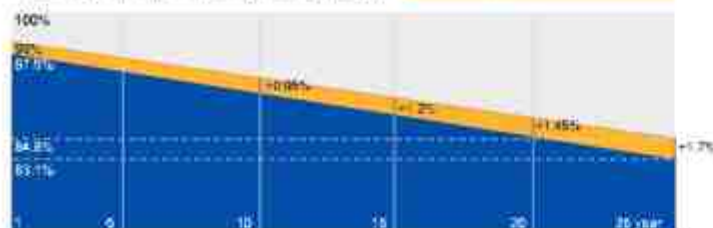


Better mechanical loading tolerance

Superior Warranty

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

0.55% Annual Degradation Over 25 years



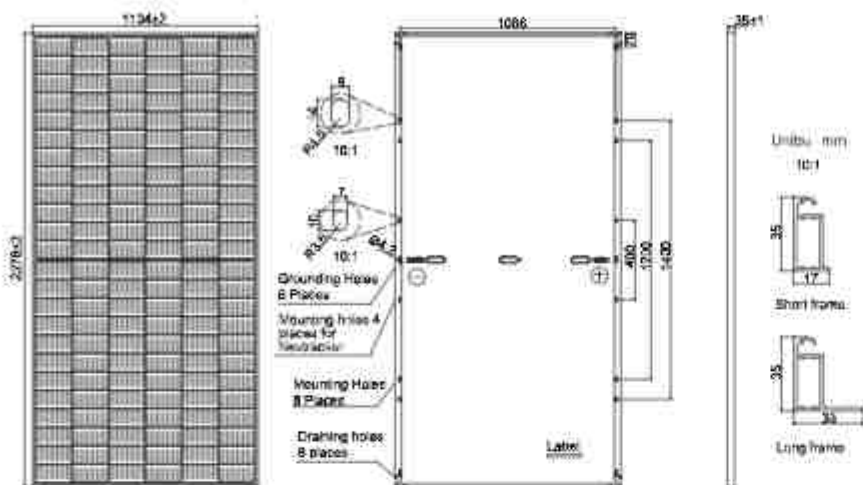
■ New linear power warranty ■ Standard module linear power warranty

Comprehensive Certificates

- IEC 61215, IEC 61730, UL 61215, UL 61730
- ISO 9001: 2015 Quality 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



MECHANICAL DIAGRAMS



Remark: customized frame color and cable length available upon request

SPECIFICATIONS

Cell	Mono
Weight	28.1kg
Dimensions	2278±2mm×1134±2mm×35±1mm
Cable Cross Section Size	4mm ² (IEC) / 12 AWG(UL)
No. of cells	144(6×24)
Junction Box	IP68, 3 diodes
Connector	MC4-EVO2/ DC 4.10-35
Cable Length (Including Connector)	Portrait: 300mm(+)/400mm(-); Landscape: 1300mm(+)/1300mm(-)
Packaging Configuration	31pcs/Pallet 620pcs/40HQ Container

ELECTRICAL PARAMETERS AT STC

TYPE	JAM72S30-530/MR	JAM72S30-535/MR	JAM72S30-540/MR	JAM72S30-545/MR	JAM72S30-550/MR	JAM72S30-555/MR
Rated Maximum Power(P _{max}) [W]	530	535	540	545	550	555
Open Circuit Voltage(V _{oc}) [V]	49.30	49.45	49.60	49.75	49.90	50.02
Maximum Power Voltage(V _{mp}) [V]	41.31	41.47	41.64	41.80	41.96	42.11
Short Circuit Current(I _{sc}) [A]	13.72	13.78	13.86	13.93	14.00	14.07
Maximum Power Current(I _{mp}) [A]	12.83	12.90	12.97	13.04	13.11	13.18
Module Efficiency (%)	20.6	20.7	20.9	21.1	21.3	21.5
Power Tolerance	0~+5W					
Temperature Coefficient of I _{sc} (α _{Isc})	+0.045%/°C					
Temperature Coefficient of V _{oc} (β _{Voc})	-0.275%/°C					
Temperature Coefficient of P _{max} (γ _{Pmp})	-0.350%/°C					

STC Irradiance: 1000W/m², 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	JAM72S30-530/MR	JAM72S30-535/MR	JAM72S30-540/MR	JAM72S30-545/MR	JAM72S30-550/MR	JAM72S30-555/MR
Rated Max Power(P _{max}) [W]	401	405	408	412	416	420
Open Circuit Voltage(V _{oc}) [V]	46.18	46.31	46.43	46.55	46.68	46.85
Max Power Voltage(V _{mp}) [V]	38.57	38.76	38.99	39.20	39.43	39.66
Short Circuit Current(I _{sc}) [A]	11.01	11.05	11.09	11.13	11.17	11.21
Max Power Current(I _{mp}) [A]	10.39	10.43	10.47	10.51	10.55	10.59

NOCT Irradiance 800W/m², ambient temperature 20°C, wind speed 1m/s, AM1.5G

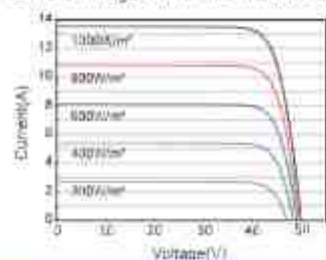
*For NextTracker installations, Maximum Static Load, Front is 1800Pa while Maximum Static Load, Back is 1600Pa.

OPERATING CONDITIONS

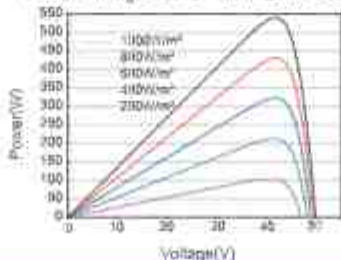
Maximum System Voltage	1000V/1500V DC
Operating Temperature	-40°C~+85°C
Maximum Series Fuse Rating	25A
Maximum Static Load, Front*	5400Pa(112lb/ft ²)
Maximum Static Load, Back*	2400Pa(50lb/ft ²)
NOCT	45±2°C
Safety Class	Class II
Fine Performance	UL Type 1

CHARACTERISTICS

Current-Voltage Curve JAM72S30-540/MR



Power-Voltage Curve JAM72S30-540/MR



Current-Voltage Curve JAM72S30-540/MR

