

DEEP BLUE 4.0 Pro

Mono

600W n-type Bifacial Double Glass
High Efficiency Mono Module
JAM72D40 575-600/LB/1500V Series

Introduction

Power by the latest SMBB n-type solar cell, half-cell configuration, these modules have higher output power, lower LID, better weak illumination response, and better temperature coefficient.



Higher power generation
better LCOE



Better weak illumination response



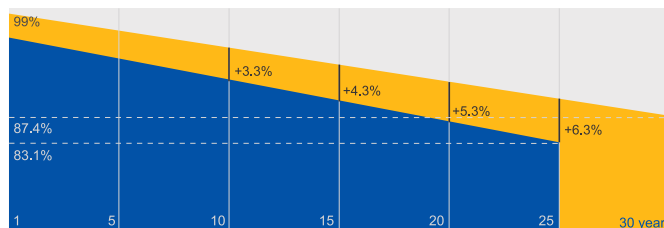
Better Temperature Coefficient

Superior Warranty

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

1% 1st-year Degradation

0.4% Annual Degradation
Over 30 years



■ n-type Bifacial Double Glass Module
Linear Performance Warranty

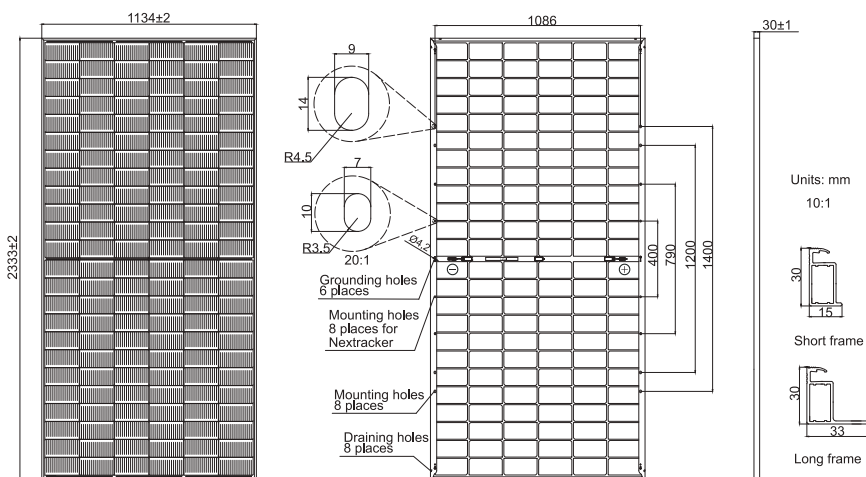
■ Standard Module Linear
Performance Warranty

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-16BB
Weight	32.5kg
Dimensions	2333±2mm×1134±2mm×30±1mm
Cable Cross Section Size	4mm ² (IEC), 12 AWG(UL)
No. of cells	144(6×24)
Junction Box	IP68, 3 diodes
Connector	Stäubli MC4-EVO2A/MC4-EVO2 QC Solar QC 4.10-351/QC 4.10-35
Cable Length (Including Connector)	Portrait: 300mm(+)/400mm(-); 800mm(+)/800mm(-)(Leapfrog) Landscape: 1400mm(+)/1400mm(-)
Front Glass/Back Glass	2.0mm/2.0mm
Country of Manufacturer	China/Vietnam

ELECTRICAL PARAMETERS AT STC

TYPE	JAM72D40- 575/LB/1500V	JAM72D40- 580/LB/1500V	JAM72D40- 585/LB/1500V	JAM72D40- 590/LB/1500V	JAM72D40- 595/LB/1500V	JAM72D40- 600/LB/1500V
Rated Maximum Power(P _{max}) [W]	575	580	585	590	595	600
Open Circuit Voltage(V _{oc}) [V]	51.40	51.60	51.80	52.00	52.20	52.40
Maximum Power Voltage(V _{mp}) [V]	42.88	43.06	43.24	43.41	43.59	43.76
Short Circuit Current(I _{sc}) [A]	14.16	14.23	14.29	14.35	14.42	14.48
Maximum Power Current(I _{mp}) [A]	13.41	13.47	13.53	13.59	13.65	13.71
Module Efficiency [%]	21.7	21.9	22.1	22.3	22.5	22.7
Power Tolerance	0~+5W					
Temperature Coefficient of I _{sc} (α _{Isc})	+0.046%/°C					
Temperature Coefficient of V _{oc} (β _{Voc})	-0.260%/°C					
Temperature Coefficient of P _{max} (γ _{Pmp})	-0.300%/°C					
STC	Irradiance 1000W/m ² , 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.
Measurement tolerance at STC: P_{max} ±3 %, V_{oc} ±3% and I_{sc} ±4%.

ELECTRICAL CHARACTERISTICS WITH 10% SOLAR IRRADIATION RATIO

TYPE	JAM72D40- 575/LB/1500V	JAM72D40- 580/LB/1500V	JAM72D40- 585/LB/1500V	JAM72D40- 590/LB/1500V	JAM72D40- 595/LB/1500V	JAM72D40- 600/LB/1500V
Rated Max Power(P _{max}) [W]	621	626	632	637	643	648
Open Circuit Voltage(V _{oc}) [V]	51.40	51.60	51.80	52.00	52.20	52.40
Max Power Voltage(V _{mp}) [V]	42.88	43.06	43.24	43.41	43.59	43.76
Short Circuit Current(I _{sc}) [A]	15.30	15.36	15.43	15.50	15.57	15.64
Max Power Current(I _{mp}) [A]	14.48	14.55	14.61	14.68	14.74	14.81
Irradiation Ratio (rear/front)	10%					

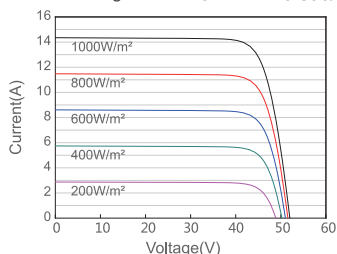
*For NexTracker installations, maximum static load please take compatibility approve letter between JA Solar and NexTracker for reference.
**Bifaciality=P_{max, rear}/Rated P_{max, front}

OPERATING CONDITIONS

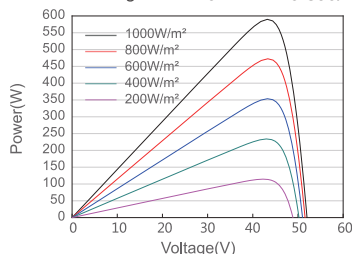
Maximum System Voltage	1500V DC
Operating Temperature	-40°C~+85°C
Maximum Series Fuse Rating	30A
Maximum Static Load, Front* Maximum Static Load, Back*	3600Pa, 1.5 1600Pa, 1.5
NOCT	45±2°C
Bifaciality**	80%±10%
Fire Safety Class	Class C

CHARACTERISTICS

Current-Voltage Curve JAM72D40-590/LB/1500V



Power-Voltage Curve JAM72D40-590/LB/1500V



Current-Voltage Curve JAM72D40-590/LB/1500V

