

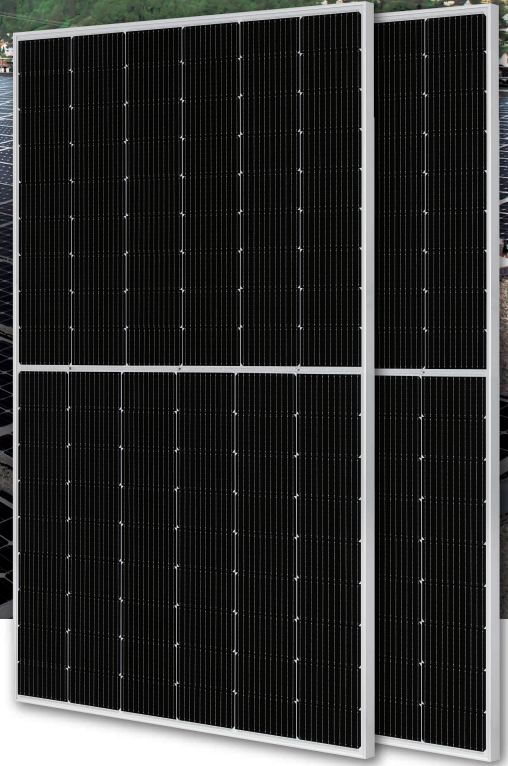
## DEEP BLUE 3.0 Pro

**Mono**

425W MBB Bifacial Mono PERC  
Half-cell Double Glass Module  
JAM54D30 400-425/GB Series

### Introduction

Assembled with 11BB bifacial PERCIUM cells and gapless ribbon connection technology, 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

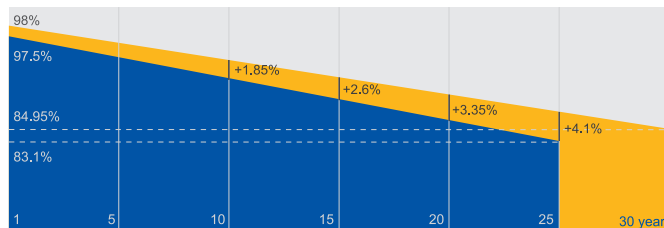


Lower temperature coefficient

### 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

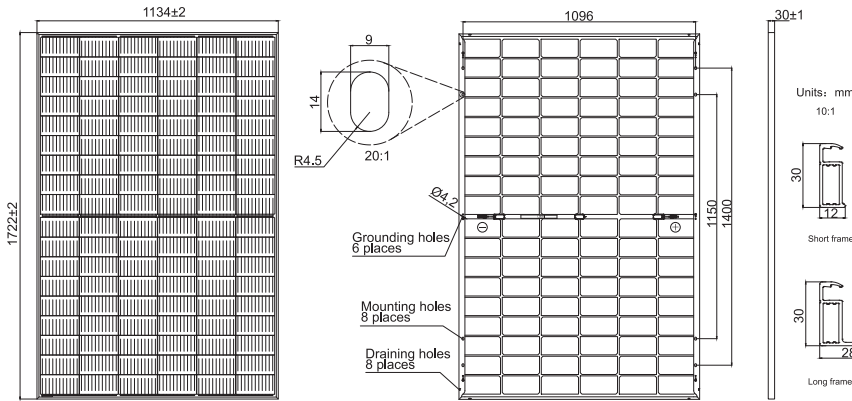
### Comprehensive Certificates

- IEC 61215, IEC 61730, 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**

**SPECIFICATIONS**



Cell	Mono
Weight	21.5kg
Dimensions	1722±2mm×1134±2mm×30±1mm
Cable Cross Section Size	4mm <sup>2</sup> (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: 200mm(+)/300mm(-); 800mm(+)/800mm(-)(Leapfrog) Landscape: 1100mm(+)/1100mm(-)
Front Glass/Back Glass	1.6mm/1.6mm
Packaging Configuration	36pcs/Pallet 936pcs/40HQ Container

Remark: customized frame color and cable length available upon request

**ELECTRICAL PARAMETERS AT STC**

TYPE	JAM54D30 -400/GB	JAM54D30 -405/GB	JAM54D30 -410/GB	JAM54D30 -415/GB	JAM54D30 -420/GB	JAM54D30 -425/GB
Rated Maximum Power(Pmax) [W]	400	405	410	415	420	425
Open Circuit Voltage(Voc) [V]	37.07	37.23	37.32	37.45	37.58	37.72
Maximum Power Voltage(Vmp) [V]	31.01	31.21	31.45	31.61	31.80	31.98
Short Circuit Current(Isc) [A]	13.79	13.87	13.95	14.02	14.10	14.18
Maximum Power Current(Imp) [A]	12.90	12.98	13.04	13.13	13.21	13.29
Module Efficiency [%]	20.5	20.7	21.0	21.3	21.5	21.8
Power Tolerance				0~+5W		
Temperature Coefficient of Isc(α <sub>Isc</sub> )				+0.045%/°C		
Temperature Coefficient of Voc(β <sub>Voc</sub> )				-0.275%/°C		
Temperature Coefficient of Pmax(γ <sub>Pmp</sub> )				-0.350%/°C		
STC	Irradiance 1000W/m <sup>2</sup> , 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 CHARACTERISTICS WITH 10% SOLAR IRRADIATION RATIO**

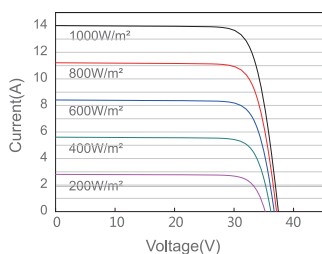
**OPERATING CONDITIONS**

TYPE	JAM54D30 -400/GB	JAM54D30 -405/GB	JAM54D30 -410/GB	JAM54D30 -415/GB	JAM54D30 -420/GB	JAM54D30 -425/GB	Maximum System Voltage	1500V DC
Rated Max Power(Pmax) [W]	428	433	439	444	449	455	Operating Temperature	-40°C~+85°C
Open Circuit Voltage(Voc) [V]	37.15	37.31	37.40	37.53	37.63	37.78	Maximum Series Fuse Rating	30A
Max Power Voltage(Vmp) [V]	31.01	31.20	31.44	31.61	31.84	32.08	Maximum Static Load,Front*	3600Pa(75 lb/ft <sup>2</sup> )
Short Circuit Current(Isc) [A]	14.76	14.84	14.93	15.00	15.10	15.18	Maximum Static Load,Back*	2400Pa(50 lb/ft <sup>2</sup> )
Max Power Current(Imp) [A]	13.80	13.89	13.95	14.05	14.11	14.18	NOCT	45±2°C
Irradiation Ratio(rear/front)	10%						Bifaciality**	70%±10%
							Fire Performance	UL Type 29

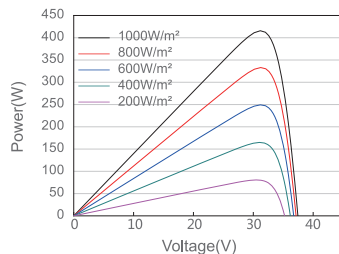
\*For NexTracker installations, Maximum Static Load, Front is 2400Pa while Maximum Static Load, Back is 2400Pa.  
\*\*Bifaciality=Pmax\_rear/Rated Pmax\_front

**CHARACTERISTICS**

Current-Voltage Curve JAM54D30-415/GB



Power-Voltage Curve JAM54D30-415/GB



Current-Voltage Curve JAM54D30-415/GB

