GOLDEN SOLAR

Make Solar Energy More Efficient!

JGDN120

HJT Bifacial Module

- Based on 210 mm wafer, N-type bifacial HJT half-cut cells
- Module power up to 670W; module efficiency up to 23.67%
- Use super MBB half-cut cell technology to minimize micro-crack impacts, so no cutting loss on modules
- Power output from the front is 4.1% more than that of TOPCon module, and power output from the back is 14.76% more than that of TOPCon module
- No Boron-Oxygen-Induced Degradation (BO-LID), excellent anti-LeTID & anti-PID performance. Low power degradation, and high energy yield
- Bifaciality up to 90%

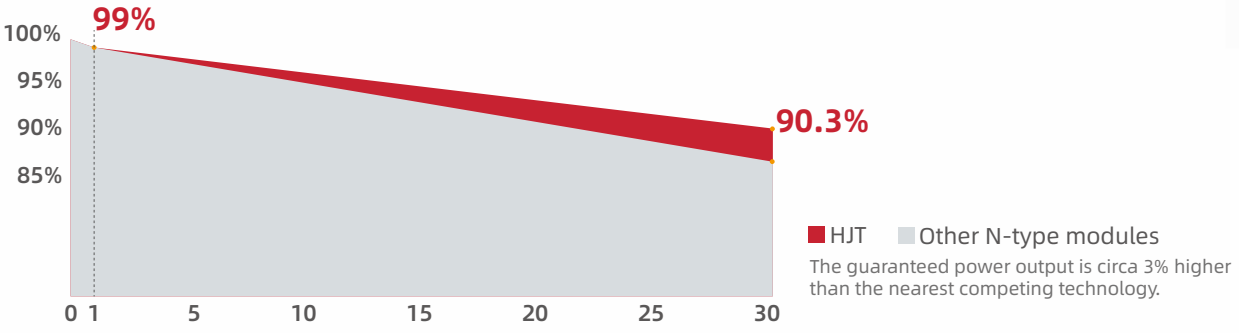
640W~670W

HJT

Size > 2 ㎡

15-Year Warranty for Materials and Processing

30-Year Warranty for Extra Linear Power Output



The guaranteed power output is circa 3% higher than the nearest competing technology.

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JGDN120

GOLDEN SOLAR

STC

STC (Standard Test Conditions): Irradiance 1000 W/m², Cell Temperature 25℃, Air Mass 1.5.

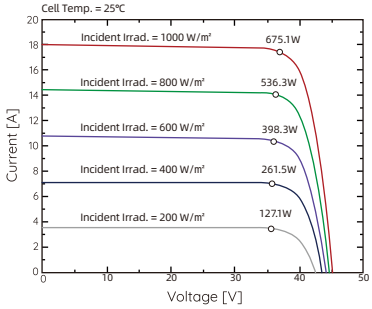
Model	JGDN120-640	JGDN120-645	JGDN120-650	JGDN120-655	JGDN120-660	JGDN120-665	JGDN120-670
Power Tolerance (0~+5W)	STC	STC	STC	STC	STC	STC	STC
Pmax (W)	640	645	650	655	660	665	670
Vmp (V)	38.60	38.74	38.88	39.01	39.15	39.28	39.41
Imp (A)	16.58	16.65	16.72	16.79	16.58	16.93	17.00
Voc (V)	45.54	45.70	45.86	46.02	46.18	46.34	46.50
Isc (A)	17.33	17.42	17.53	17.64	17.75	17.86	17.97
Panel Efficiency (%)	22.60	22.79	22.97	23.14	23.32	23.50	23.67

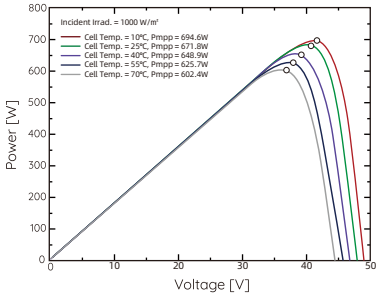
BSTC

BSTC (Bifacial Standard Test Conditions): Front Side Irradiation 1000 W/m², Back Side Reflection Irradiation 135 W/m², Air Mass 1.5, Ambient Temperature 25℃.

Model	JGDN120-640	JGDN120-645	JGDN120-650	JGDN120-655	JGDN120-660	JGDN120-665	JGDN120-670
Power Tolerance (0~+5W)	BSTC	BSTC	BSTC	BSTC	BSTC	BSTC	BSTC
Pmax (W)	705	710	715	720	725	730	735
Vmp (V)	38.60	38.74	38.88	39.01	39.15	39.28	39.41
Imp (A)	18.26	18.33	18.39	18.46	18.52	18.58	18.65
Voc (V)	45.54	45.70	45.86	46.02	46.18	46.34	46.50
Isc (A)	19.11	19.21	19.34	19.47	19.60	19.73	19.86

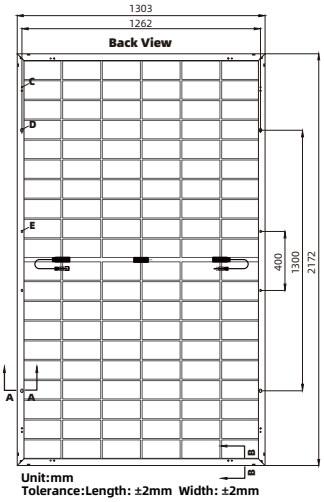
Electrical Curves (670W):





Mechanical Specification

Solar Cell Type	120 half-cut, N-type, HJT cells
Module Dimensions	2172×1303×35 mm
Module Weight	35.5 kg
Front Side	Anti-reflective coated solar glass, 2.0 mm thick
Back Side	Solar glass, 2.0 mm thick
Frame	Anodized aluminum
Junction Box	3 bypass diodes, IP68 rated to IEC 62790
Cable	4 mm² PV cable, 0.3 m long (lengths can be customized), complies with EN 50618
Connector	MC4 compatible



Properties of System Design

Maximum System Voltage	1500V
Maximum Series Fuse Rating	35A
Max. Test Load +/- (incl. Safety Factor of 1.5)	5400/2400Pa
Fire Class according to IEC 61730	CLASS C (UL 790)
Operating Temperature	-40 to + 85℃

Temperature Coefficients

Temperature Coefficient of Isc	+0.033 %/℃
Temperature Coefficient of Voc	-0.243 %/℃
Temperature Coefficient of Pmax	-0.243 %/℃
Nominal Module Operating Temperature (NMOT)	43±3/ ℃

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

Packing

31 pcs/pallet, 558 pcs/40'HQ container

*The specifications and key features contained in this datasheet may deviate slightly from our actual products due to the ongoing innovation and product enhancement. Golden Solar reserves the right to make necessary adjustments to the information described herein at any time without further notice.