GOLDEN SOLAR

Make Solar Energy More Efficient!

JGDN144

HJT Bifacial Module

- Based on 182 mm wafer, N-type HJT half-cut cells
- Module power up to 590W; module efficiency up to 22.80%
- 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
- With the temperature coefficient -0.243%/℃

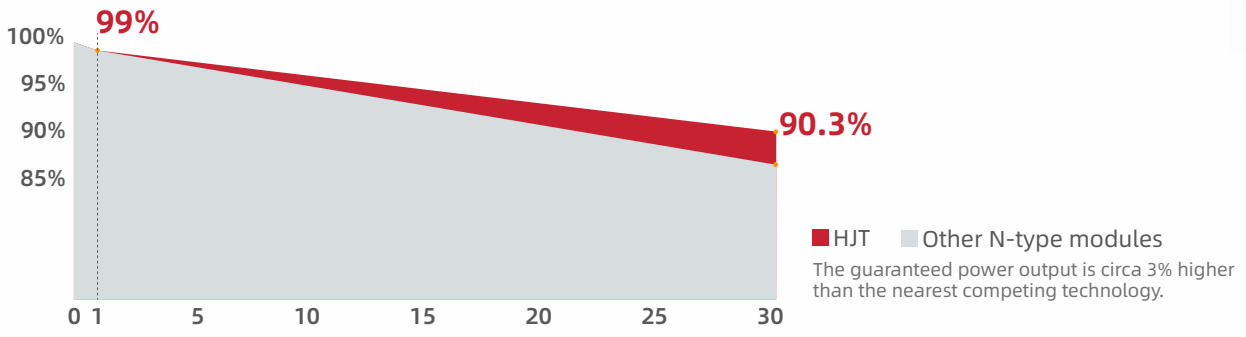
560W~590W

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.

www.goldensolarcorp.com

JGDN144

GOLDEN SOLAR

STC/NMOT

STC (Standard Test Conditions): Irradiance 1000 W/m², Cell Temperature 25°C, Air Mass 1.5.
NMOT (Nominal Module Operating Temperature): Irradiance 800 W/m², Air Mass 1.5, Temperature 20°C, Wind Speed 1 m/s.

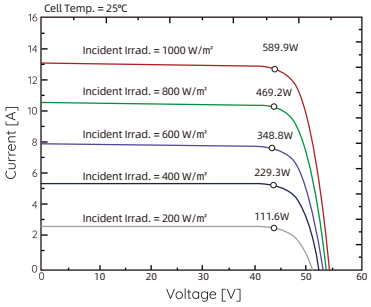
Model	JGDN144-560		JGDN144-565		JGDN144-570		JGDN144-575		JGDN144-580		JGDN144-585		JGDN144-590	
Power Tolerance (0~+5W)	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Pmax (W)	560	433	565	438	570	443	575	448	580	453	585	458	590	463
Vmp (V)	45.72	43.04	45.94	43.22	46.15	43.41	46.37	43.58	46.58	43.77	46.80	43.93	47.01	44.09
Imp (A)	12.25	10.06	12.30	10.11	12.35	10.16	12.40	10.21	12.45	10.26	12.50	10.31	12.55	10.36
Voc (V)	53.76	52.40	53.81	52.68	53.88	52.96	53.96	53.24	54.03	53.51	54.13	53.78	54.21	54.05
Isc (A)	12.81	10.42	12.86	10.46	12.91	10.50	12.96	10.54	13.01	10.58	13.06	10.62	13.11	10.66
Panel Efficiency (%)	21.70		21.90		22.10		22.30		22.50		22.60		22.80	

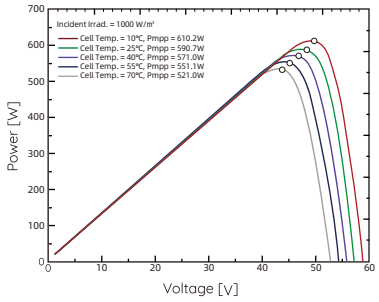
BSTC

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°C.

Model	JGDN144-560	JGDN144-565	JGDN144-570	JGDN144-575	JGDN144-580	JGDN144-585	JGDN144-590
Power Tolerance (0~+5W)	BSTC	BSTC	BSTC	BSTC	BSTC	BSTC	BSTC
Pmax (W)	616	621	626	631	636	641	646
Vmp (V)	44.48	44.70	44.92	45.14	45.35	45.57	45.79
Imp (A)	13.85	13.89	13.96	14.02	14.07	14.13	14.19
Voc (V)	53.63	53.86	54.09	54.32	54.55	54.78	55.01
Isc (A)	14.20	14.25	14.31	14.35	14.39	14.45	14.51

Electrical Curves (590W):





Mechanical Specification

Solar Cell Type	144 half-cut, N-type, HJT cells
Module Dimensions	2278×1134×30 mm
Module Weight	31.8 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	25A
Max. Test Load +/- (incl. Safety Factor of 1.5)	5400/2400Pa
Fire Class according to EN 13501-1	CLASS C (EN13501-1)
Operating Temperature	-40 to + 85°C

Temperature Coefficients

Temperature Coefficient of Isc	+0.026%/ °C
Temperature Coefficient of Voc	-0.223%/ °C
Temperature Coefficient of Pmax	-0.243%/ °C
Nominal Module Operating Temperature (NMOT)	43±3/ °C

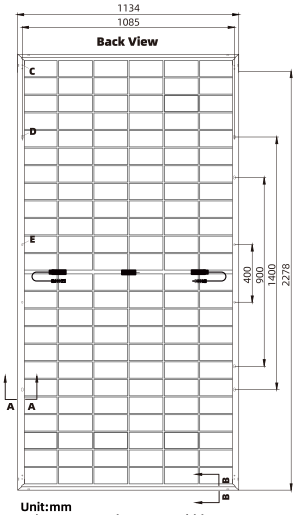
Comprehensive Certificates

- 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

36 pcs/pallet, 720 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.



Unit:mm
Tolerance:Length: ±2mm Width: ±2mm