



GOLDEN SOLAR

Make Solar Energy More Efficient!

JGDN96B

HJT Bifacial Module



Based on 210 R wafer, N-type bifacial HJT half-cut cells



Module power up to 460W; module efficiency up to 23.02%



OBB thin-slice half-cut technology, using a stencil printing process and silver-coated copper



Power output from the front is 4.1% more than that of TOPCon module



Anti Boron-Oxygen-Induced Degradation (BO-LID), excellent anti-LeTID & anti-PID performance. Low power degradation, and high energy yield



Bifaciality up to 90%

445W~460W



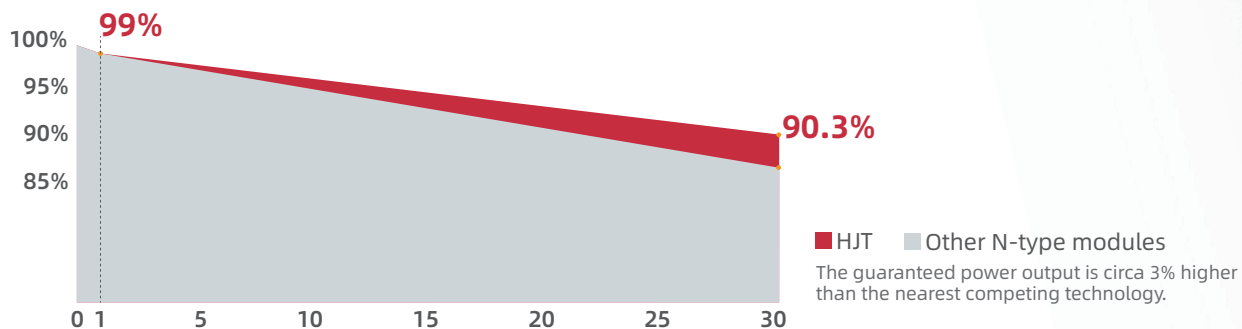
Size < 2 m²



30-Year Warranty for Materials and Processing



30-Year Warranty for Extra Linear Power Output



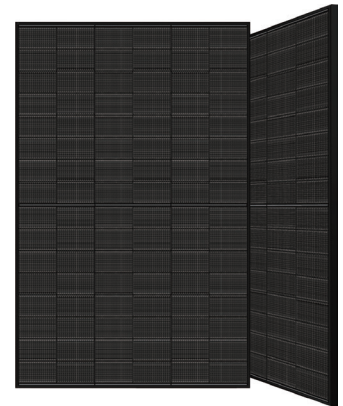
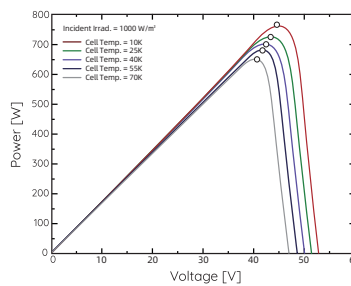
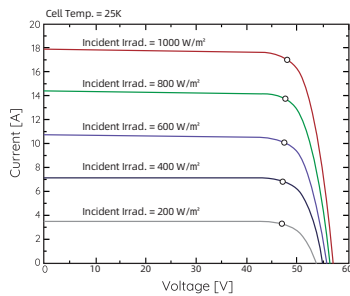
STC STC (Standard Test Conditions): Irradiance 1000 W/m², Cell Temperature 25K, Air Mass 1.5.

Model	JGDN96-445	JGDN96-450	JGDN96-455	JGDN96-460
Power Tolerance (0~+5W)	STC	STC	STC	STC
Pmax (W)	445	450	455	460
Vmp (V)	30.72	30.83	30.94	31.05
Imp (A)	14.49	14.60	14.71	14.82
Voc (V)	36.62	36.72	36.82	36.92
Isc (A)	15.42	15.53	15.64	15.75
Panel Efficiency (%)	22.30	22.50	22.80	23.02

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 25K.

Model	JGDN96-445	JGDN96-450	JGDN96-455	JGDN96-460
Power Tolerance (0~+5W)	BSTC	BSTC	BSTC	BSTC
Pmax (W)	499	504	510	515
Vmp (V)	30.83	30.94	31.05	31.16
Imp (A)	16.19	16.31	16.44	16.54
Voc (V)	36.75	36.85	36.95	37.05
Isc (A)	17.29	17.42	17.54	17.66

Electrical Curves (460W):



Mechanical Specification

Solar Cell Type	HJT Mono 182x105mm
Module Dimensions	1762 x 1134 x30 mm
Module Weight	21kg
Front Side	Anti-reflective coated solar glass, 1.6mm thick
Back Side	White glazed glass, 1.6mm thick
Frame	Anodized aluminum
Junction Box	3 bypass diodes, IP68 rated to IEC 62790
Cable	4 mm ² PV cable, 1.2 m long (lengths can be customized), complies with EN 50618
Connector	MC4 EVO2

Properties of System Design

Maximum System Voltage	1500V
Maximum Series Fuse Rating	30A
Max. Test Load +/- (incl. Safety Factor of 1.5)	5400/2400Pa
Fire Class	IEC Class C, UL Class C, UNI Class 1
Protection Class	Class II
Operating Temperature	-40 to +85K

Temperature Coefficients

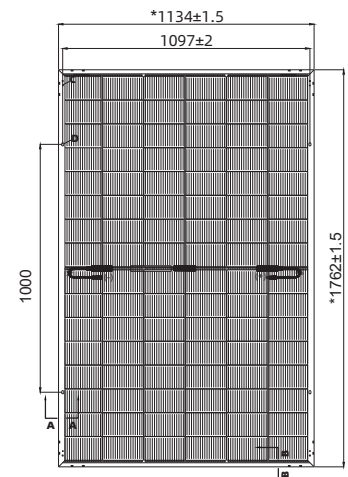
Temperature Coefficient of Isc	+0.04 %/K
Temperature Coefficient of Voc	-0.24 %/K
Temperature Coefficient of Pmax	-0.24 %/K
Nominal Module Operating Temperature (NMOT)	44±2K

Comprehensive Certificates

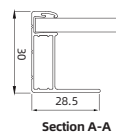
- IEC 61215, IEC 61730
- UNI 9177, UL 790, MCS, PVEL
- ISO 9001, ISO 14001, ISO 45001

Packing

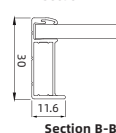
36 pcs/pallet, 936 pcs/40'HQ container



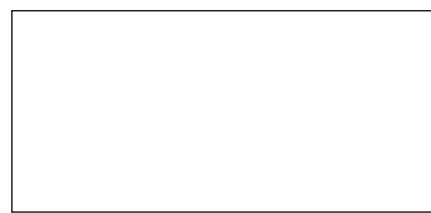
Unit:mm
Tolerance:Length: ±2mm Width: ±2mm



Grounding holes C



Mounting holes D



*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.