

650W-670W

SZA-132NT-BF

**BIFACIAL
DOUBLE-GLASS**

24.80%

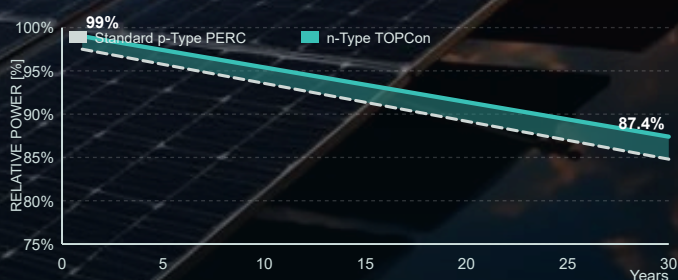
Maximum Efficiency

132

Half Cells

- ◆ N-type TOPCon Technology
- ◆ Enhanced efficiency and power performance
- ◆ Excellent low-light and high-temperature performance
- ◆ Long-term reliability with minimal degradation
- ◆ Certified to IEC 61215 & IEC 61730 standards

OUR PERFORMANCE WARRANTY



30 YEARS

Performance Warranty

15 YEARS

Product Warranty

≤ 1% first-year degradation, then 0.4 percentage points of initial rated power annually
— 87.4% min. warranted power at year 30

*Specifications are subject to change without notice. Actual performance may vary. Warranty terms are defined in the latest SOLANZO Limited Warranty.



BIFACIAL - DOUBLE GLASS

SZA-132NT-BF 650W-670W

N-TYPE TOPCON TECHNOLOGY

Electrical specifications (STC*):

Module model	SZA-132NT-BF-	650	655	660	665	670
Nominal max. power P_{max} (Wp)		650	655	660	665	670
Maximum operating voltage V_M (V)		42.57	42.70	42.83	42.96	43.09
Maximum operating current I_M (A)		15.27	15.34	15.41	15.48	15.55
Open-circuit voltage V_{oc} (V)		50.26	50.44	50.62	50.80	50.98
Short-circuit current I_{sc} (A)		15.98	16.04	16.10	16.16	16.22
Module efficiency η (%)		24.06	24.25	24.43	24.62	24.80
Power tolerance (W)		0~+3				
Maximum system voltage (V/DC)		1500				
Maximum series fuse rating (A)		35				

*STC: Standard Test Conditions (irradiance 1000 W/m², cell temperature 25°C and air mass of AM1.5), measurement tolerance P_{max}: ±3%.

Electrical specifications (BNPI*: 1000 W/m² + 135 W/m²):

Nominal max. power P_{max} (Wp)	724	729	735	741	746
Maximum operating voltage V_M (V)	42.52	42.69	42.86	43.03	43.20
Maximum operating current I_M (A)	17.03	17.08	17.15	17.22	17.27
Open-circuit voltage V_{oc} (V)	50.38	50.56	50.74	50.92	51.10
Short-circuit current I_{sc} (A)	17.80	17.87	17.94	18.00	18.07

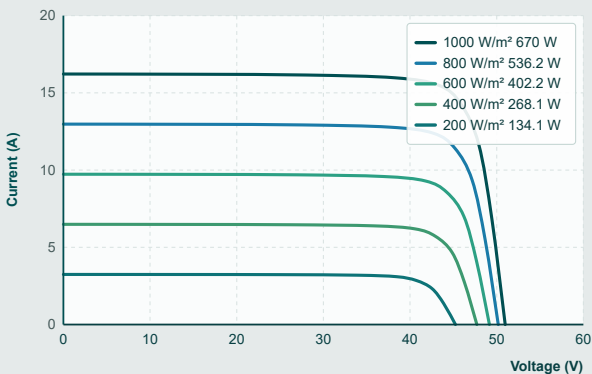
*BNPI (Bifacial Nameplate Irradiance, per IEC TS 60904-1-2): front-side irradiance 1000 W/m² and rear-side irradiance 135 W/m², cell temperature 25 °C, air mass AM1.5. Actual bifacial energy yield depends on rear-side irradiance, ground albedo, mounting configuration, and installation conditions. Nominal bifaciality factor: 80% (±5 percentage points).

Bifacial electrical specifications

Max. power front-side P _{max front} (Wp)	650		655		660		665		670	
Backside Power Gain	5%	10%	5%	10%	5%	10%	5%	10%	5%	10%
Total equivalent power P _{max equ} (Wp)	683	715	688	721	693	726	698	732	704	737

*Bifacial gain values represent the instantaneous increase in electrical power due to rear-side irradiance, expressed as a percentage of the module's front-side rated power at STC. Actual energy yield depends on mounting configuration, rear-side irradiance, and ground albedo.

Cells temp. = 25°C



Mechanical and design specifications

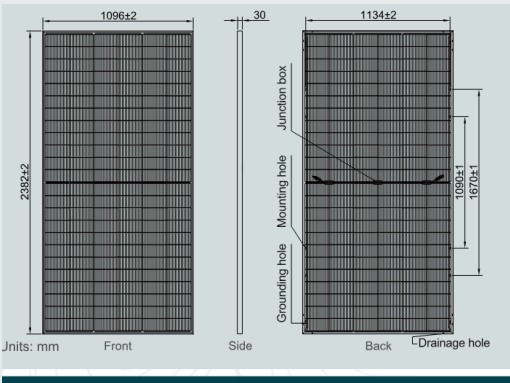
Cell type	N-Type Monocrystalline TOPCon Bifacial Half-Cut Cells
Cell configuration	132 Half-Cut Cells (6 × 11 × 2)
Bifaciality	80 ± 5%
Front cover	2.0 mm glass, high transmission, AR coated, tempered
Encapsulation	POE
Back cover	2.0 mm transparent tempered glass
Junction box	IP68 rated, 3 bypass diodes
Frame	30 mm anodized aluminium alloy
Cable (incl. connectors)	2 × 4 mm ² (+/-), 300 mm or customized
Connectors	MC4-type, IP68 rated
Dimension	2382 mm x 1134 mm x 30 mm
Weight	32.4 kg
Hail resistance	Max. Ø 25 mm at 23 m/s
Wind load	2400 Pa or 244 kg/m ²
Snow load	5400 Pa or 550 kg/m ²
Fire rating	Class A (according to UL 790)

Packaging information

	L (length): 2396 mm H (height): 1110 mm W (width): 1251 mm		36 pcs One pallet		1166 kg Pallet weight		720 pcs 40HQ container
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Temperature ratings

Operating temperature	-40 to +85°C
Temp. coefficient of P _{max}	-0.29 %/°C
Temp. coefficient of V _{oc}	-0.25 %/°C
Temp. coefficient of I _{sc}	0.046 %/°C
Nom. operating cell temp. NOCT	42 ± 2°C



Environmental & reliability testing: IEC 62716 Ammonia Corrosion Resistance · IEC 61701 Salt Mist Corrosion Resistance · IEC 60068-2-68 Sand & Dust Resistance · IEC TS 62804-1 PID Resistance · IEC TS 63209-1 Extended-Stress Reliability · IEC 62892 Extended Thermal Cycling

Specifications are subject to change without notice. Electrical data are based on STC conditions. Actual performance may vary. Warranty terms are defined in the latest SOLANZO Limited Warranty.

PRODUCT CERTIFICATIONS



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