NBJD Series

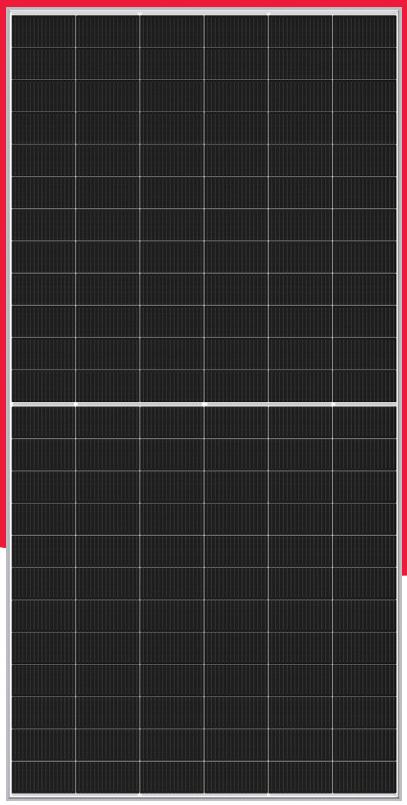
NBJD585 / 590

585 / 590 W

The Project Solution

GOLD | Top 5%
ecovadis
Sustainability Rating
OCT 2024

Bifacial



Powerful product features

- Max. system voltage 1,500 V
  Lower BOS costs by longer strings
- Module efficiency
  22.65 / 22.84%
  N-Type TOPCon monocrystalline silicon photovoltaic modules
- +% Guaranteed positive power tolerance (0/+5 %)
- MBB busbar technology
  Improved reliability
  Higher efficiency
  Reduced series resistance
- Half-cut cell
  Improved shading performance
  Lower internal losses
- Bifacial module
  Additional rear side power gain
- Tested and certified
  VDE, IEC/EN61215, IEC/EN61730
  Safety class II, CE, UKCA, MCS
  Fire rating class C
- Robust product design
  PID resistance test passed
  Salt mist test passed (IEC61701)
  Ammonia test passed (IEC62716)
  Dust and sand test passed (IEC60068)

Your solar partner for life

- 65 YEARS 65 years of solar expertise
- Local support team in Europe
- 30 YEARS Linear power output guarantee
- 50 MIL 50 million PV modules installed
- 15* YEARS Product guarantee
  not on roof
- 25* YEARS Product guarantee
  on roof

Energy Solutions

SHARP
Be Original.

* Applicable for modules installed within the EU and additional listed countries.
Please check the guarantee conditions for your area before purchasing.

Electrical data (STC)

		NBJD585		NBJD590	
Maximum power	P_{max}	585		590	W_p
Open-circuit voltage	V_{oc}	52.76		52.98	V
Short-circuit current	I_{sc}	14.09		14.15	A
Voltage at point of maximum power	V_{mpp}	43.37		43.55	V
Current at point of maximum power	I_{mpp}	13.49		13.55	A
Module efficiency	η_m	22.65		22.84	%
Bifaciality coefficient	φ	φ P_{max} = 80 (±10)	φ V_{oc} = 99 (±10)	φ I_{sc} = 80 (±10)	%

STC = Standard Test Conditions: irradiance 1,000 W/m², AM 1.5, cell temperature 25 °C.
Rated electrical characteristics are within ±10 % of the indicated values of I_{sc}, V_{oc} and 0 to +5 % of P_{max}.

Electrical data (BNPI, BSI, Low Light)

		NBJD585	NBJD590	
Maximum power BNPI	P_{max}	647	654	W_p
Open-circuit voltage BNPI	V_{oc}	52.95	53.23	V
Short-circuit current BNPI	I_{sc}	15.59	15.68	A
Short-circuit current BSI	I_{sc}	17.47	17.55	A
Maximum power low light	P_{max}	115.27	116.22	W_p

BNPI: Bifacial Nameplate Irradiance: 1,000 W/m² (front) and 135 W/m² (rear); BSI: Bifacial Stress Irradiance: 1,000 W/m² (front) and 300 W/m² (rear)
Low light conditions: irradiance 200 W/m², cell temperature of 25 °C
Rated electrical characteristics are within ±10 % of the indicated values of I_{sc}, V_{oc} and 0 to +5 % of P_{max}.

Mechanical data

Length	2,278 mm
Width	1,134 mm
Depth	30 mm
Weight	32.5 kg

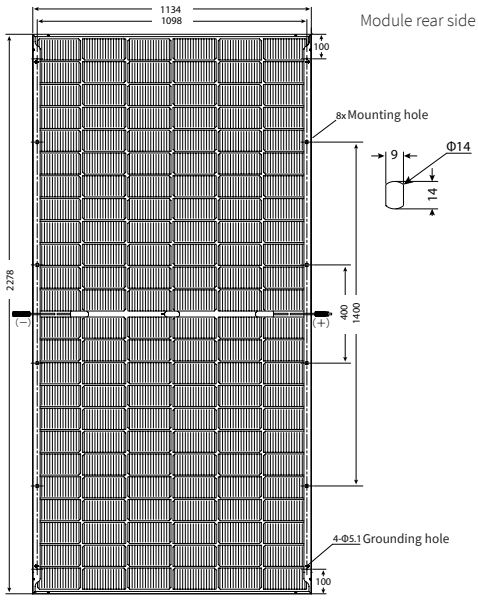
Temperature coefficient

P_{max}	-0.300 %/°C
V_{oc}	-0.248 %/°C
I_{sc}	0.047 %/°C

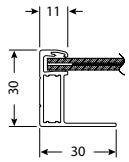
Limit values

Maximum system voltage	1,500 V DC
Over-current protection	30 A
Temperature range	-40 to 85 °C
Max. mechanical load (snow/wind)	2,400 Pa
Tested snow load (IEC61215 test pass*)	5,400 Pa

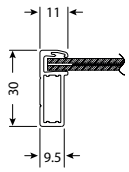
Dimensions (mm)



Module rear side view



Frame long side cross section



Frame short side cross section

*Please refer to SHARP's installation manual for details.

Packaging data**

Modules per pallet	36 pcs
Pallet size (L × W × H)	2.31 m × 1.12 m × 1.21 m
Pallet weight	Approx. 1.210 kg

**Special offloading requirements, please refer to QR code or: www.sharp.eu/nbjd-offloading

General data

Cells	Half-cut cell mono, 182 mm x 92 mm, MBB, 2 strings of 72 cells in series
Front glass	Anti-reflective high transmissive low iron semi-tempered glass, 2 mm
Rear glass	Semi-tempered glass, 2 mm
Frame	Anodized aluminium alloy, silver
Cable	ø 4.0 mm², length (+) 400 mm, (-) 200 mm
Connection box	IP68 rating, 3 bypass diodes
Connector	Solargiga C1, IP68

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