

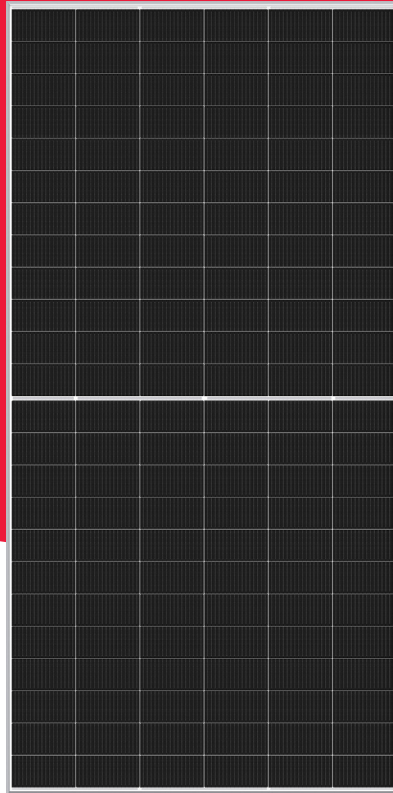
NBJD Series

NBJD590


590 W


The Project Solution

Bifacial




Powerful product features


 Max. system voltage 1,500 V
Lower BOS costs by longer strings


 Module efficiency 22.84%
N-Type TOPCon monocrystalline silicon photovoltaic modules

+% Guaranteed positive power tolerance (0/+5 %)


MBB 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)

NBJD590					
Maximum power	P_{max}		590	W_p	
Open-circuit voltage	V_{oc}		52.98	V	
Short-circuit current	I_{sc}		14.15	A	
Voltage at point of maximum power	V_{mpp}		43.55	V	
Current at point of maximum power	I_{mpp}		13.55	A	
Module efficiency	η_m		22.84	%	
Bifaciality coefficient	φ	$\varphi P_{max} = 80 (\pm 10)$	$\varphi V_{oc} = 99 (\pm 10)$	$\varphi I_{sc} = 80 (\pm 10)$	%

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)

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

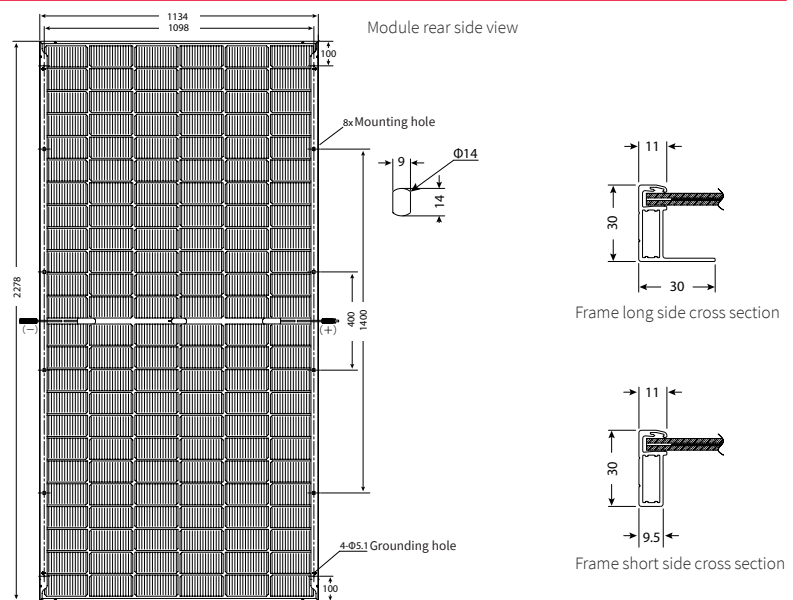
Packaging data**

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



Dimensions (mm)



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

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 mm ² , length (+) 400 mm, (-) 200 mm
Connection box	IP68 rating, 3 bypass diodes
Connector	Solargiga C1, IP68

Note: Technical data is subject to change without prior notice. Before using SHARP products, please request the latest data sheets from SHARP. SHARP accepts no responsibility for damage to devices which have been equipped with SHARP products on the basis of unverified information. The specifications may deviate slightly and are not guaranteed. Installation and operating instructions are to be found in the corresponding handbooks, or can be downloaded from www.sharp.eu. This module should not be directly connected to a load.