

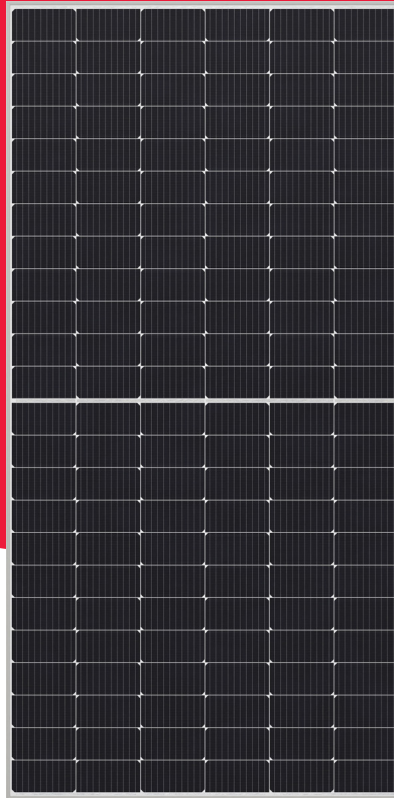
NB-JD Series

NB-JD545 / 550


545 / 550 W


The Project Solution

Bifacial




Powerful product features


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




 Module efficiency 21.1 / 21.3 %
PERC 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
Reduced hot spot risk

 Bifacial module
Additional rear side power gain

 Tested and certified
VDE, IEC/EN61215, IEC/EN61730
 Safety class II, CE
 Fire rating class A

 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

60
YEARS 60 years of solar expertise

 Local support team in Europe

30
YEARS Linear power output guarantee

50
MIL 50 million PV modules installed

12*
YEARS Product guarantee

1
TIER Tier 1 - BloombergNEF



Energy Solutions

SHARP
Be Original.

* Applicable for modules installed in countries as shown in the guarantee conditions.

Electrical data (STC)

		NB-JD545 (STC)	NB-JD545 (NMOT)	NB-JD550 (STC)	NB-JD550 (NMOT)	
Maximum power	P_{max}	545	406.79	550	410.52	W_p
Open-circuit voltage	V_{oc}	50.40	47.13	50.63	47.35	V
Short-circuit current	I_{sc}	13.77	11.12	13.83	11.17	A
Voltage at point of maximum power	V_{mpp}	42.25	39.38	42.44	39.55	V
Current at point of maximum power	I_{mpp}	12.90	10.33	12.96	10.38	A
Module efficiency	η_m	21.1		21.3		%
Bifaciality factor		70 ±5		70 ±5		%

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} . Reduction of efficiency from an irradiance change of 1,000 W/m² to 200 W/m² ($T_{module} = 25 °C$) is less than 3 %.
 NMOT = Nominal Module Operating Temperature: 45 °C, irradiance 800 W/m², air temperature of 20 °C, wind speed of 1 m/s.

Bifacial Generation Data (STC)

		NB-JD545					NB-JD550					%
		5	10	15	20	25	5	10	15	20	25	
Power gain rear side		5	10	15	20	25	5	10	15	20	25	
Maximum power	P_{max}	572.49	599.53	626.99	654.03	681.49	577.61	605.19	632.36	659.94	687.53	W_p
Open-circuit voltage	V_{oc}	50.40	50.40	50.40	50.40	50.40	50.63	50.63	50.63	50.63	50.63	V
Short-circuit current	I_{sc}	14.46	15.15	15.84	16.52	17.21	14.52	15.21	15.90	16.60	17.29	A
Voltage at point of maximum power	V_{mpp}	42.25	42.25	42.25	42.25	42.25	42.44	42.44	42.44	42.44	42.44	V
Current at point of maximum power	I_{mpp}	13.55	14.19	14.84	15.48	16.13	13.61	14.26	14.90	15.55	16.20	A

Mechanical data

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

Temperature coefficient

P_{max}	-0.349 %/°C
V_{oc}	-0.267 %/°C
I_{sc}	0.049 %/°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

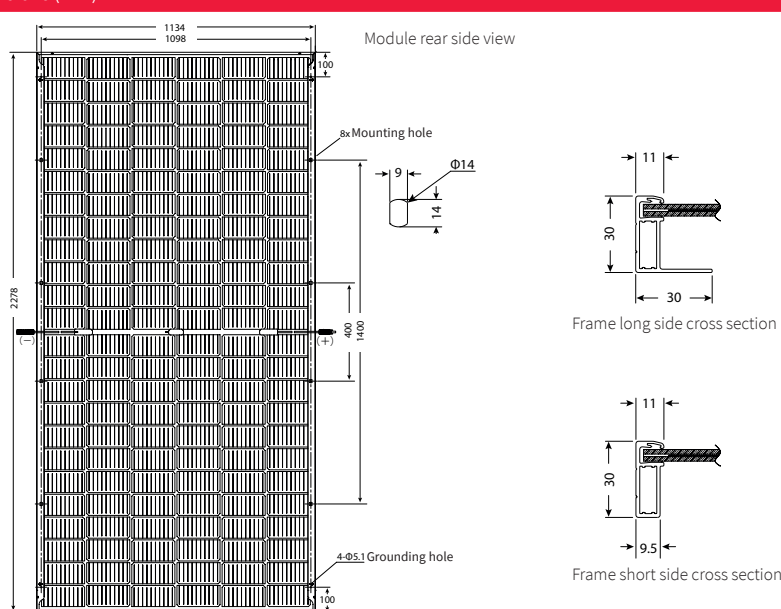
Packaging data**

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 91 mm, MBB, 2 strings of 72 cells in series
Front glass	Anti-reflective high transmissive low iron tempered glass, 2 mm
Rear glass	Tempered glass, 2 mm
Frame	Anodized aluminium alloy, silver
Cable	∅ 4.0 mm ² , length (+) 397 mm, (-) 50 mm [or on request (+)/(-) 1,500 mm]
Connection box	IP68 rating, 3 bypass diodes
Connector	C1, IP68