

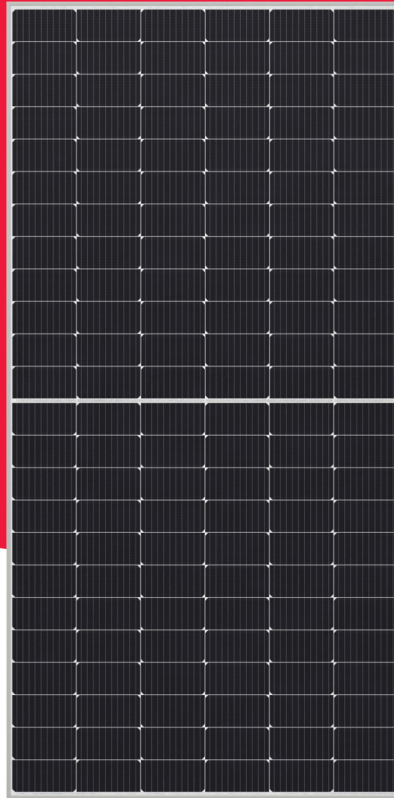
NB-JD Series

NB-JD540

540 W

The Project Solution

Bifacial



Powerful product features



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

MBB

MBB busbar technology
Improved reliability
Higher efficiency
Reduced series resistance



Tested and certified
VDE, IEC/EN61215, IEC/EN61730



Safety class II, CE
Fire rating class A



High module efficiency 20.9 %
PERC monocrystalline silicon
photovoltaic modules



Half-cut cell
Improved shading performance
Lower internal losses
Reduced hot spot risk



Robust product design
PID resistance test passed
Salt mist test passed (IEC61701)
Ammonia test passed (IEC62716)
Dust and sand test passed (IEC60068)



Guaranteed positive power
tolerance (0/+5 %)



Bifacial module
Additional rear side power gain

Your solar partner for life

60
YEARS

60 years of solar expertise

30
YEARS

Linear power output guarantee

15*
YEARS

Product guarantee



Local support team in Europe

50
MIL

50 million PV modules installed

1
TIER

Tier 1 - BloombergNEF



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, NMOT)

		NB-JD540 (STC)		NB-JD540 (NMOT)	
Maximum power	P_{max}	540		402.97	W_p
Open-circuit voltage	V_{oc}	50.24		46.98	V
Short-circuit current	I_{sc}	13.69		11.05	A
Voltage at point of maximum power	V_{mpp}	42.06		39.20	V
Current at point of maximum power	I_{mpp}	12.84		10.28	A
Module efficiency	η_m	20.9			%
Bifaciality factor		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-JD540					
		5	10	15	20	25	%
Power gain rear side							
Maximum power	P_{max}	566.96	594.06	620.80	648.06	675.06	W_p
Open-circuit voltage	V_{oc}	50.24	50.24	50.24	50.24	50.24	V
Short-circuit current	I_{sc}	14.37	15.06	15.74	16.43	17.11	A
Voltage at point of maximum power	V_{mpp}	42.06	42.06	42.06	42.06	42.06	V
Current at point of maximum power	I_{mpp}	13.48	14.12	14.76	15.41	16.05	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

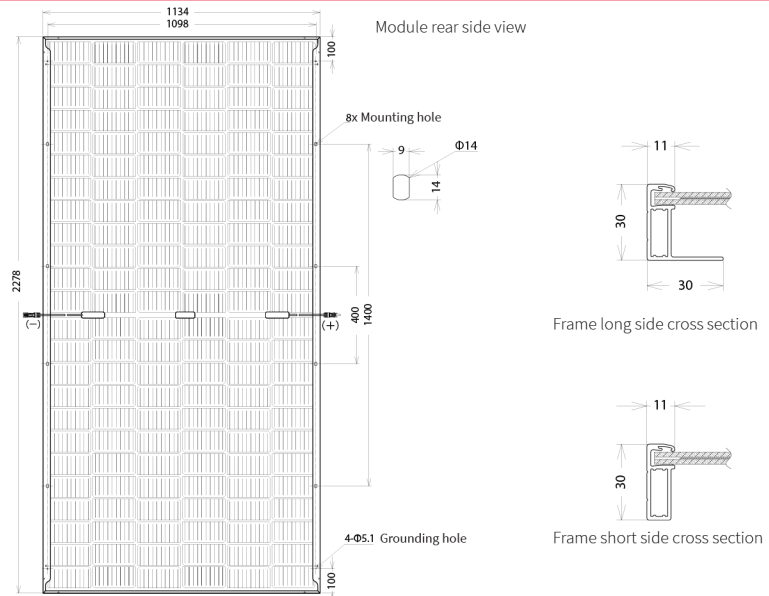
Packaging data**

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/NBJD540-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

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.