

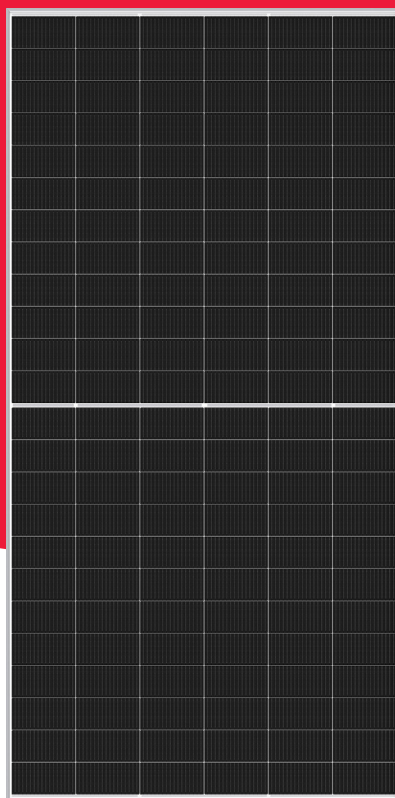
NBJD Series

# NBJD585 / 590

585 / 590 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



Module efficiency  
22.65 / 22.84 %  
N-Type TOPCon monocrystalline silicon  
photovoltaic modules



**Half-cut cell**  
Improved shading performance  
Lower internal losses



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



**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** 65 years of solar expertise  
YEARS



**25** Linear power output guarantee  
YEARS



**12\*** Product guarantee  
YEARS



Local support team in Europe



**50** 50 million PV modules installed  
MIL



Energy Solutions

**SHARP**  
Be Original.

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

## 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	$\eta_m$	22.65	22.84	%
Bifaciality coefficient	$\phi$	$\phi P_{max} = 80 (\pm 10)$	$\phi V_{oc} = 99 (\pm 10)$ $\phi I_{sc} = 80 (\pm 10)$	%

STC = Standard Test Conditions: irradiance 1,000 W/m<sup>2</sup>, AM 1.5, cell temperature 25 °C.  
Rated electrical characteristics are within  $\pm 10\%$  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/m<sup>2</sup> (front) and 135 W/m<sup>2</sup> (rear); BSI: Bifacial Stress Irradiance: 1,000 W/m<sup>2</sup> (front) and 300 W/m<sup>2</sup> (rear)  
Low light conditions: irradiance 200 W/m<sup>2</sup>, cell temperature of 25 °C  
Rated electrical characteristics are within  $\pm 10\%$  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

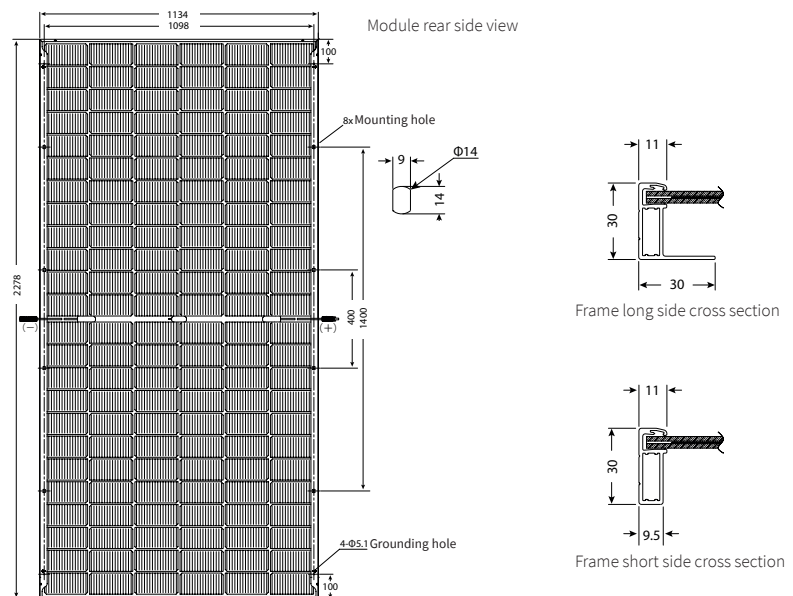
## Packaging data\*\*

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

\*\*Special offloading requirements, please refer to QR code or:  
[www.sharp.eu/nbjd-offloading](http://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 <sup>2</sup> , 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](http://www.sharp.eu). This module should not be directly connected to a load.