

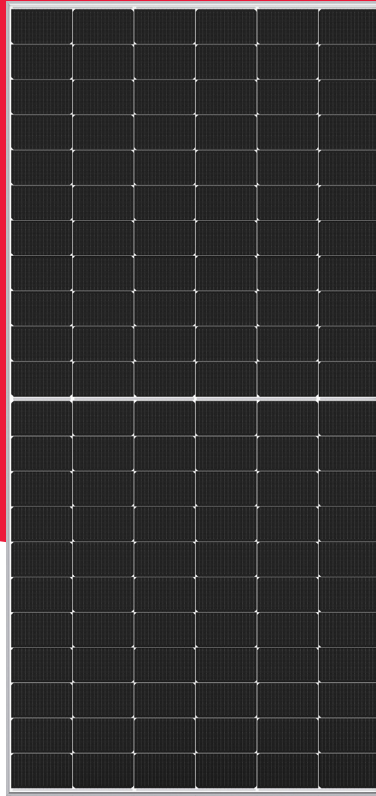
NBJE Series

# NBJE610

610 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, UKCA, (MCS under application)



Fire rating class C



Module efficiency 22.58%  
N-Type TOPCon monocrystalline silicon photovoltaic modules



Half-cut cell  
Improved shading performance  
Lower internal losses



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



65 YEARS 65 years of solar expertise



30 YEARS Linear power output guarantee



15\* YEARS Product guarantee not on roof



Local support team in Europe



50 MIL 50 million PV modules installed



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)

		NBJE610			
Maximum power	$P_{max}$		610		$W_p$
Open-circuit voltage	$V_{oc}$		48.54		V
Short-circuit current	$I_{sc}$		16.00		A
Voltage at point of maximum power	$V_{mpp}$		40.56		V
Current at point of maximum power	$I_{mpp}$		15.04		A
Module efficiency	$\eta_m$		22.58		%
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)

		NBJE610			
Maximum power BNPI	$P_{max}$		674		$W_p$
Open-circuit voltage BNPI	$V_{oc}$		48.71		V
Short-circuit current BNPI	$I_{sc}$		17.70		A
Short-circuit current BSI	$I_{sc}$		19.84		A
Maximum power low light	$P_{max}$		120.23		$W_p$

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	2,382 mm
Width	1,134 mm
Depth	30 mm
Weight	34 kg

## Temperature coefficient

$P_{max}$	-0.290 %/°C
$V_{oc}$	-0.240 %/°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

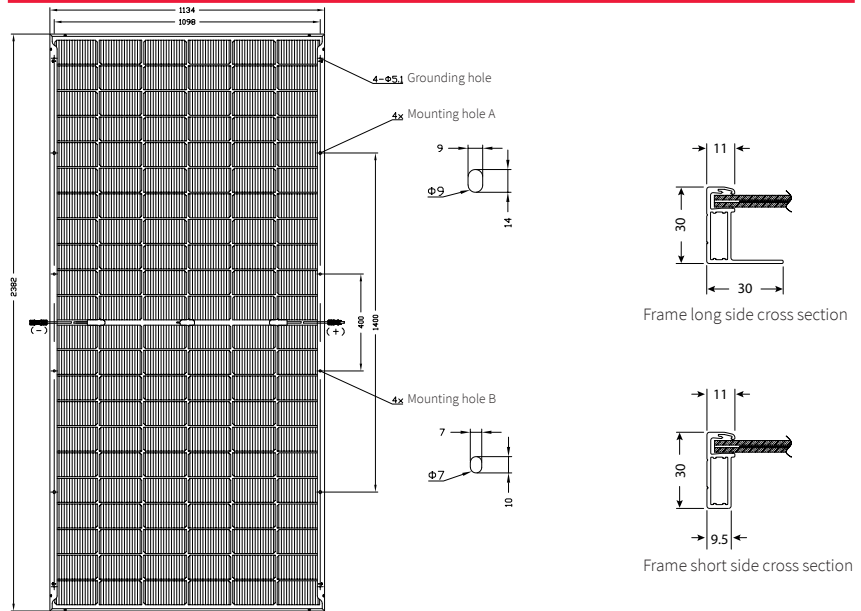
## Packaging data\*\*

Modules per pallet	36 pcs
Pallet size (L x W x H)	2.39 m x 1.13 m x 1.25 m
Pallet weight	Approx. 1.290 kg

\*\*Special offloading requirements, please refer to QR code or: [www.sharp.eu/nbj-e-offloading](http://www.sharp.eu/nbj-e-offloading)



## Dimensions (mm)



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

## General data

Cells	Half-cut cell mono, 182 mm x 105 mm, MBB, 2 strings of 66 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	$\varnothing$ 4.0 mm <sup>2</sup> , length 1.600 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.