

# WST-NHX Glass-Glass-Series

515 Watt HJT for commercial solar systems

**Hey!** I am  
your module.

**More warranty.**

25 years product warranty.  
30 years performance warranty.  
At least 90.3 % residual power  
after 30 years.

**More power.**

HJT technology for improved  
power yield.  
Higher energy yield due to  
bifaciality factor of 95 %.

**More safety.**

2 x 2 mm tempered glass with  
anti-reflective coating.



**WINAICO**<sup>®</sup>

## Mechanical Data WINAICO WST-NHX54-A4 GLASS-GLASS-SERIES

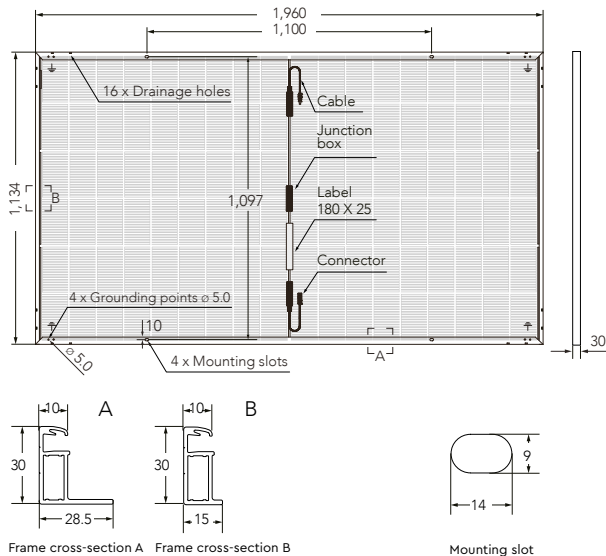
Cells	Monocrystalline N-type, bifacial
Bifaciality	90 ± 5 %
Quantity of cells	108 (6 × 18 half cells)
Dimensions	1,960 × 1,134 × 30 mm
Weight	27.4 kg
Front glass	2.0 mm, tempered, highly transparent glass with anti-reflective coating
Encapsulation	EVA / EVA
Back glass	2.0 mm, tempered, highly transparent glass, partially white printed
Frame	Black anodised aluminium
Junction box	IP68, 3 Bypass Diodes
Connector type	PV-KST4-EVO2A/xy, PV-KBT4-EVO2A/xy
Cable length	Cable 2 × 1.250 mm / 4 mm <sup>2</sup>
Safety class (IEC 61140)	II
Fire safety class (IEC 61730)	C

## Warranty

Product warranty	25 years
Performance warranty	30 years
Annual power degradation	0,30 %
Performance after 30 years	≥ 90,3 % of rated power

The warranty conditions apply.

## Dimensions in mm



## Operating conditions

## WST-515NHX54-A4

Operating temperature	°C	-40 to +85
Maximum system voltage	V	1.500
Maximum series fuse I <sub>R</sub>	A	30
Maximum design load (push/pull)	Pa	3.600/1.600
Maximum test load (push/pull)	Pa	5.400/2.400
Temperature coefficient of P <sub>MAX</sub>	%/°C	-0,24
Temperature coefficient of U <sub>OC</sub>	%/°C	-0,22
Temperature coefficient of I <sub>SC</sub>	%/°C	0,04
Nominal module operating temperature NMOT	°C	44 ± 2

## Electrical data

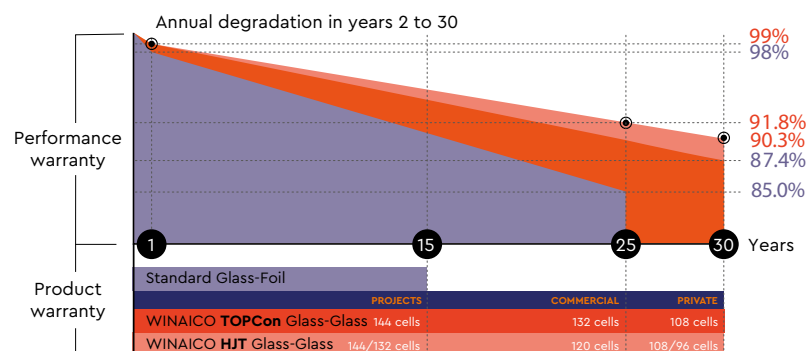
## WST-515NHX54-A4

		STC <sup>1</sup>	NMOT <sup>2</sup>
Nominal performance P <sub>MPP</sub>	Wp	515	393
Voltage at maximum performance V <sub>MPP</sub>	V	34,49	32,93
Current at maximum performance I <sub>MPP</sub>	A	14,94	11,94
Open circuit voltage V <sub>OC</sub>	V	41,09	39,22
Short circuit current I <sub>SC</sub>	A	15,81	12,64
Module efficiency (STC)	%	23,2 (232 W/m <sup>2</sup> )	
Increased performance through	10 % P <sub>MPP</sub> W	567 (+52)	
Power Bifaciality*	15 % P <sub>MPP</sub> W	592 (+77)	
*Depending on irradiation conditions	20 % P <sub>MPP</sub> W	618 (+103)	
Power tolerance	W	-0/+5	

<sup>1</sup> Electrical data applies under standard test conditions (STC): solar radiation 1,000 W/m<sup>2</sup> with light spectrum AM 1,5, with cell temperature 25 °C. Measurement tolerance of P<sub>MAX</sub> at STC: ±3 %. Accuracy of other electrical data: ±10 %.

<sup>2</sup> Electrical data applies under Nominal Module Operating Temperature (NMOT), irradiance of 800 W/m<sup>2</sup>, spectrum AM 1,5, ambient temperature 20 °C, wind speed 1 m/s.

## Warranty service



## Certifications

IEC 61215:2021, IEC 61730:2023

ISO 9001 Quality Management System  
 ISO 50001 Occupational Health and Safety Management System  
 ISO 14001 Environment Management System  
 SA 8000 Social Responsibility

WEEE Registration number:  
 DE85493209



WINAICO Deutschland GmbH  
 Tel. + 49 7933 700 300  
 Fax + 49 7933 700 3010  
 germany@winaico.com · www.winaico.com  
 Industriestraße 68, 97993 Creglingen, GERMANY

