

Up to 435 watt

WST-NGX-D3

N-Type Bifacial Glass-Glass Series

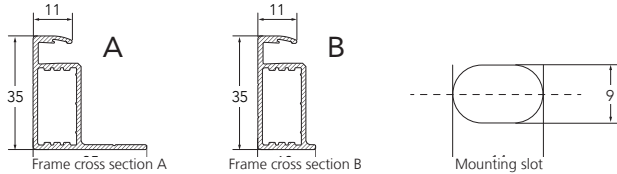
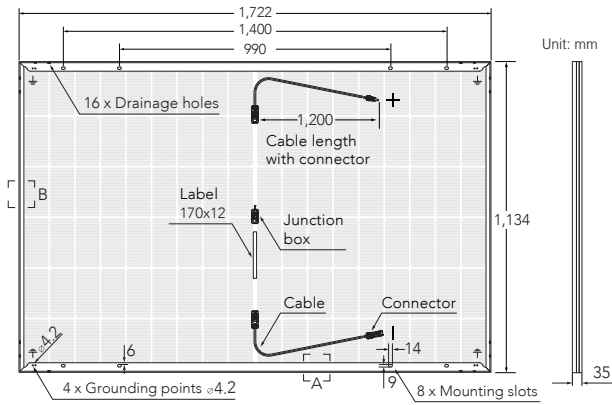
Higher yield panel design for commercial and residential owners



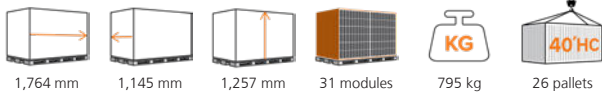
Power to Perform

www.winaico.com

DIMENSIONS



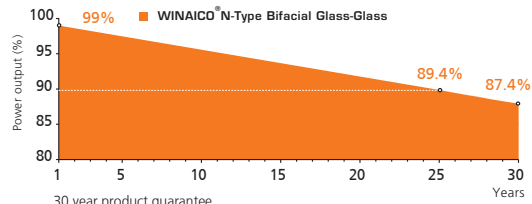
PACKAGING



MECHANICAL DATA WINAICO WST-NGX-D3 SERIES

Cell	Monocrystalline, N-type, bifacial
Quantity and wiring of cells	108 (6 strings x 18 cells)
Bifaciality	Up to 80 %
Dimensions	1,722 x 1,134 x 35 mm (67.80 x 44.65 x 1.38 in)
Weight	24 kg (52.9 lbs)
Front-side glass	2.0 mm, tempered solar glass with anti-reflective coating
Back-side glass	2.0 mm, tempered solar glass, partially white printed
Encapsulant material	POE
Frame	Black anodised aluminium
Junction box	IP68, 3 bypass diodes
Connector type	Stäubli MC4-EVO2A IP68
Cable length (IEC/UL)	Cable 2 x 1.2 m / 4 mm ²
Fire safety class ⁴ (IEC61730)	C
Protection class (IEC 61140)	II

WINAICO PERFORMANCE GUARANTEE



30 year product guarantee.
Linear performance guarantee for 30 years.
No more than 0.4% degradation per year from 2nd year to 30th year.

Operating conditions

Operating conditions	WINAICO WST-NGX-D3
Operating temperature	-40 °C to +85 °C / -40 °F to +185 °F
Maximum system voltage IEC/UL	1,500V/1,500V
Maximum series fuse	30 A
Maximum design load (push/pull)	3,600 Pa/1,600 Pa
Maximum test load (push/pull)	5,400 Pa/2,400 Pa
Nominal module operating temperature NMOT	42 ± 2 °C
Temperature coefficient of P _{MAX}	-0.30%/°C
Temperature coefficient of V _{OC}	-0.25%/°C
Temperature coefficient of I _{SC}	0.045%/°C
Certifications	IEC 61215-1:2016, IEC 61215-2:2016, IEC 61730-1:2016, IEC 61730-2:2016

Electrical data (STC)¹

Electrical data (STC) ¹		WST-430NGX-D3	WST-435NGX-D3	
		Nominal performance P _{MAX}	430	
Voltage at maximum performance V _{MP}		32.68	33.01	V
Current at maximum performance I _{MP}		13.16	13.18	A
Open circuit voltage V _{OC}		38.60	38.72	V
Short circuit current I _{SC}		13.80	13.89	A
Module efficiency		22.02	22.30	%
Bifacial gain ³ *Depending on irradiation conditions	10 % P _{MPP}	473 (+43)	478 (+43)	W
	15 % P _{MPP}	494 (+64)	500 (+65)	W
	20 % P _{MPP}	516 (+86)	522 (+87)	W
Power tolerance		-0/+5	-0/+5	W

Electrical data (NMOT)²

Electrical data (NMOT) ²		WST-430NGX-D3	WST-435NGX-D3	
		Nominal performance P _{MAX}	322	
Voltage at maximum performance V _{MP}		30.51	30.83	V
Current at maximum performance I _{MP}		10.56	10.54	A
Open circuit voltage V _{OC}		36.52	36.82	V
Short circuit current I _{SC}		11.12	11.20	A

- Electrical data applies under standard test conditions (STC): solar radiation 1,000 W/m² with light spectrum AM 1.5, with cell temperature 25 °C. Measurement tolerance of P_{MAX} at STC: ±3%. Accuracy of other electrical data: ±10%.
- Electrical data applies under Nominal Module Operating Temperature (NMOT), irradiance of 800 W/m², spectrum AM 1.5, ambient temperature 20 °C, wind speed 1 m/s.
- The additional power gain from the rear side depends on the irradiance conditions at the installation site and the mounting situation.
- The fire safety test methods according to IEC 61730-2:2016 Annex B, Fire Tests of Roof Coverings.



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

