

Up to 425 watt

WST-NGXB-D3 Full Black

N-Type Bifacial Glass-Glass Series

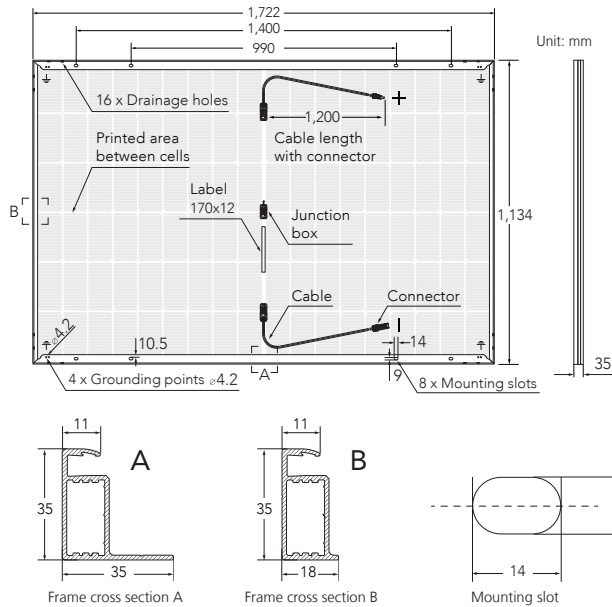
Higher yield panel design for commercial
and residential owners



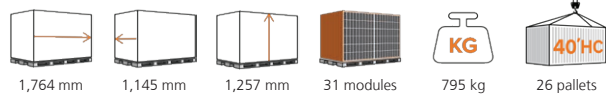
Power to Perform

www.winaico.com

DIMENSIONS



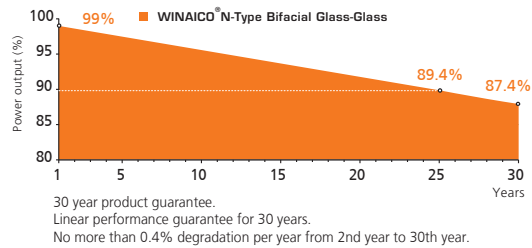
PACKAGING



MECHANICAL DATA WINAICO WST-NGXB-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 black printed
Encapsulant material	POE
Frame	Black anodised aluminium
Junction box	IP68, 3 bypass diodes
Connector type	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



Operating conditions

Operating temperature	
Maximum system voltage IEC/UL	
Maximum series fuse	
Maximum design load (push/pull)	
Maximum test load (push/pull)	
Nominal module operating temperature NMOT	
Temperature coefficient of P_{MAX}	
Temperature coefficient of V_{OC}	
Temperature coefficient of I_{SC}	
Certifications	

WINAICO WST-NGXB-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)	5,400 Pa/2,400 Pa
Maximum test load (push/pull)	8,100 Pa/3,600 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

Nominal performance	P_{MAX}	
Voltage at maximum performance	V_{MP}	
Current at maximum performance	I_{MP}	
Open circuit voltage	V_{OC}	
Short circuit current	I_{SC}	
Module efficiency		
Bifacial gain ³	10 % P_{MPP}	
	15 % P_{MPP}	
	20 % P_{MPP}	
Power tolerance		

WST-425NGXB-D3 Full Black

Nominal performance	P_{MAX}	425	Wp
Voltage at maximum performance	V_{MP}	32.35	V
Current at maximum performance	I_{MP}	13.14	A
Open circuit voltage	V_{OC}	38.54	V
Short circuit current	I_{SC}	13.79	A
Module efficiency		21.76	%
Bifacial gain ³	10 % P_{MPP}	467 (+42)	W
	15 % P_{MPP}	488 (+63)	W
	20 % P_{MPP}	510 (+85)	W
Power tolerance		-0/+5	W

Electrical data (NMOT)²

Nominal performance	P_{MAX}	
Voltage at maximum performance	V_{MP}	
Current at maximum performance	I_{MP}	
Open circuit voltage	V_{OC}	
Short circuit current	I_{SC}	

WST-425NGXB-D3 Full Black

Nominal performance	P_{MAX}	319	Wp
Voltage at maximum performance	V_{MP}	30.28	V
Current at maximum performance	I_{MP}	10.54	A
Open circuit voltage	V_{OC}	36.46	V
Short circuit current	I_{SC}	11.11	A

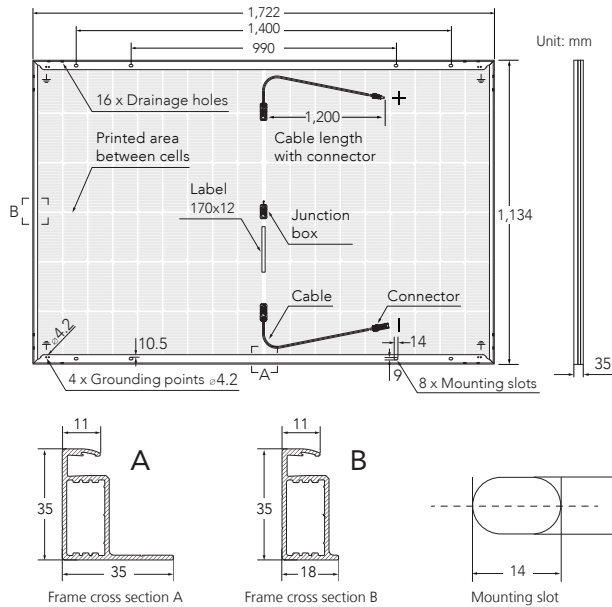
- Electrical data applies under standard test conditions (STC): solar radiation 1,000 W/m² with light spectrum AM 1.5, with cell temperature 25 °C. Measurement tolerance of P_{MAX} at STC: ±3%. Accuracy of other electrical data: ±10%.
- Electrical data applies under Nominal Module Operating Temperature (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.



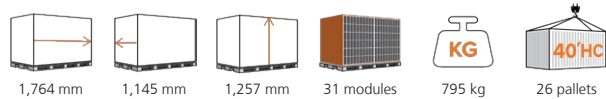
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DIMENSIONS



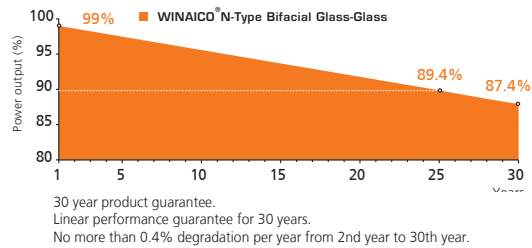
PACKAGING



MECHANICAL DATA WINAICO WST-NGXB-D3 SERIES

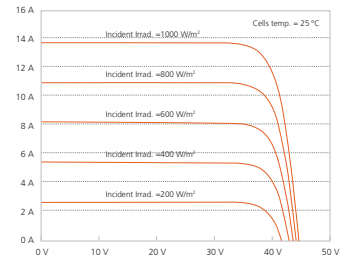
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Bifaciality	Up to 80 %
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Weight	24 kg (52.9 lbs)
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Encapsul material	POE
Frame	Black anodised aluminium
Junction box	IP68, 3 bypass diodes
Connector type	MC4-EVO2A IP68
Cable length (IEC/UL)	Cable 2 x 1.2 m (47.24 in) / 4 mm ²
Module fire performance	4
Fire safety class	C

WINAICO PERFORMANCE GUARANTEE



Operating conditions

Operating temperature	-40°C to +85°C / -40°F to +185°F
Maximum system voltage IEC/UL	1,500 V/1,500 V
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}	-0.3%/°C
Temperature coefficient of V _{OC}	-0.25%/°C
Temperature coefficient of I _{SC}	0.045%/°C



Electrical data (STC) ¹		WST-425NGXB-D3 Full Black	
Nominal performance	P _{MAX}	425	Wp
Voltage at maximum performance	V _{MP}	32.35	V
Current at maximum performance	I _{MP}	13.14	A
Open circuit voltage	V _{OC}	38.54	V
Short circuit current	I _{SC}	13.79	A
Module efficiency		21.76	%
Bifacial gain ³ *Depending on irradiation conditions	10 % Pmpp	473 (+43)	W
	15 % Pmpp	494 (+64)	W
	20 % Pmpp	516 (+86)	W
Power tolerance		-0/+5	W

Electrical data (NMOT) ²		WST-425NGXB-D3 Full Black	
Nominal performance	P _{MAX}	319	Wp
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