

Up to 450 watt

WST-NGX-D3

N-Type Bifacial Glass-Glass Series

Top performance for all applications



PERFORMANCE
WARRANTY



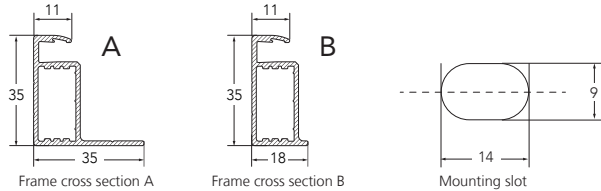
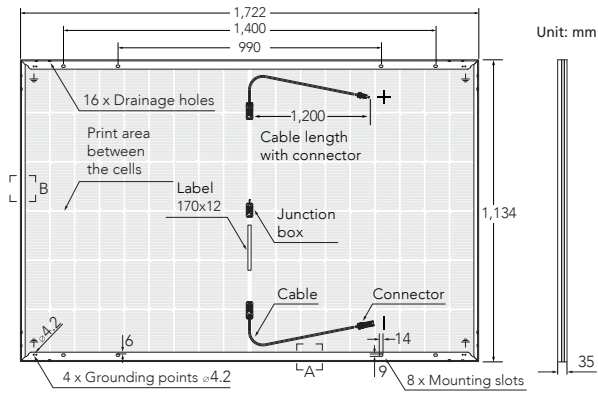
COMPLIMENTARY
INSURANCE



Power to Perform

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DIMENSIONS



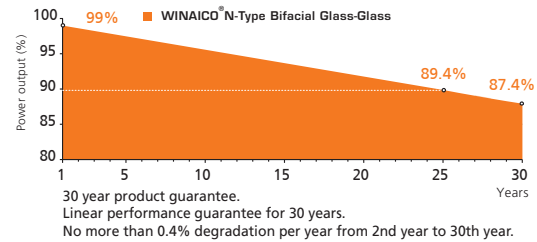
PACKAGING



MECHANICAL DATA WINAICO WST-NGX-D3 SERIES

Cell	Monocrystalline silicon cells
Quantity and wiring of cells	6 strings x 18 cells
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	1.6 mm or 2.0 mm, semi-tempered solar glass with anti-reflective coating.
Back-side glass	1.6 mm or 2.0 mm, semi-tempered solar glass, partially white printed.
Frame	Black anodised aluminium
Junction box	IP68, 3 bypass diodes
Connector type	MC4 EVO2A IP68
Cable length (IEC/UL)	Cable 2 x 1,200 mm / 4 mm ²
Fire safety class ⁴ (IEC61730)	Class C
Protection class (IEC 61140)	II

WINAICO PERFORMANCE GUARANTEE



Operating conditions		WINAICO WST-NGX-D3				
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}		-0.30%/°C				
Temperature coefficient of V _{OC}		-0.25%/°C				
Temperature coefficient of I _{SC}		0.045%/°C				
Certifications		IEC 61215-1:2021, IEC 61215-2:2021, IEC61730-1:2023, IEC 61730-2:2023				
Electrical data (STC) ¹		WST-430NGX-D3	WST-435NGX-D3	WST-440NGX-D3	WST-445NGX-D3	WST-450NGX-D3
Nominal performance	P _{MAX}	430	435	440	445	450 Wp
Voltage at maximum performance	V _{MP}	32.68	33.01	33.26	33.51	33.76 V
Current at maximum performance	I _{MP}	13.16	13.18	13.23	13.28	13.33 A
Open circuit voltage	V _{OC}	38.60	38.72	38.88	39.12	39.36 V
Short circuit current	I _{SC}	13.80	13.89	13.98	14.04	14.08 A
Module efficiency		22.00	22.30	22.50	22.8%	23.0%
Bifacial gain ³	10 % P _{mp}	473 (+43)	478 (+43)	484 (+44)	490 (+45)	495 (+45) W
	15 % P _{mp}	494 (+64)	500 (+65)	506 (+66)	512 (+67)	518 (+68) W
	20 % P _{mp}	516 (+86)	522 (+87)	528 (+88)	534 (+89)	540 (+90) W
Power tolerance		0~+5W	0~+5W	0~+5W	0~+5W	0~+5W W
Electrical data (NMOT) ²		WST-430NGX-D3	WST-435NGX-D3	WST-440NGX-D3	WST-445NGX-D3	WST-450NGX-D3
Nominal performance	P _{MAX}	322	325	329	338	342 Wp
Voltage at maximum performance	V _{MP}	30.51	30.83	31.04	31.56	31.79 V
Current at maximum performance	I _{MP}	10.56	10.58	10.60	10.71	10.75 A
Open circuit voltage	V _{OC}	36.52	36.82	36.69	37.46	37.69 V
Short circuit current	I _{SC}	11.12	11.20	11.27	11.31	11.35 A

- The electrical data applies under standard test conditions (STC): solar radiation 1,000W/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%.
- The 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 Australia Pty Ltd
 Tel + 61 2 8091 2771
 australia@winaico.com
 https://www.winaico.com.au/
 3/393 George Street, Sydney NSW 2000, Australia



WINAICO is a trademark of
 Win Win Precision Technology Co., Ltd.

Win Win Precision Technology Co., Ltd
 Tel + 886 3 568 8699 · info@w-win.com.tw
 www.wvpt.com.tw · www.winaico.com
 4F, No. 180, Sec. 2, Gongdao 5th Rd., East Dist.,
 Hsinchu City 300, Taiwan R.O.C.
 Made in China