

WINAICO

500 Watt Back Contact Series

WST-BKX54-B2 Ultra Black

More warranty.

30 years product warranty.
30 years performance warranty.
German guarantor.

More power.

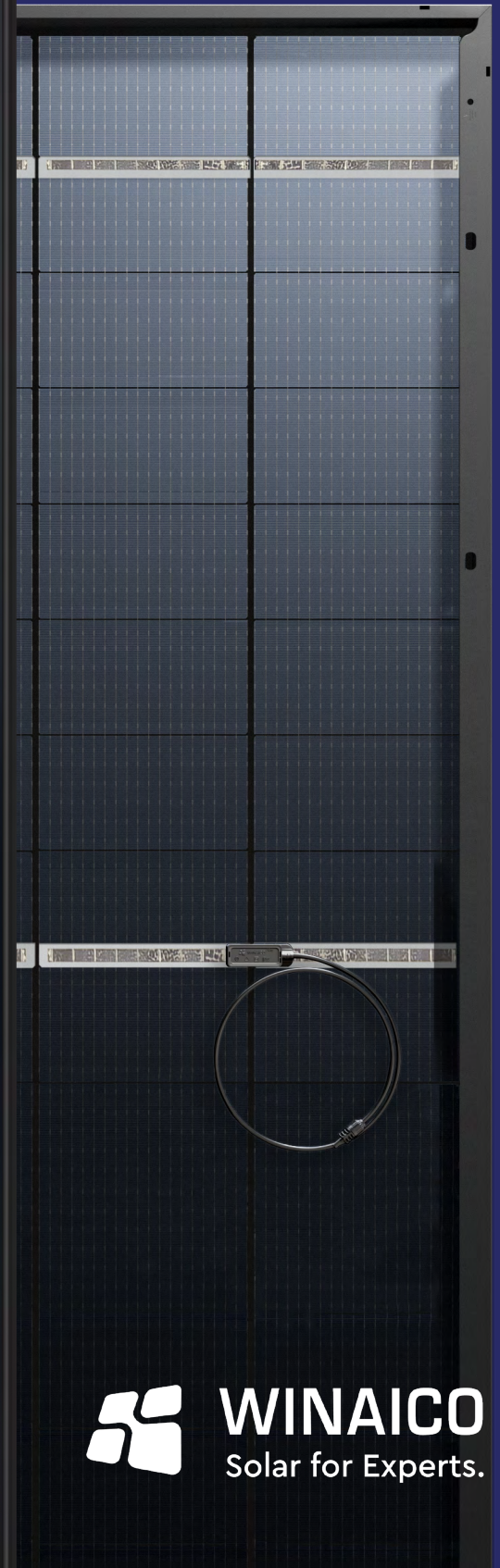
Highest area output of 245 watts/m².
At least 88,85 % residual power after 30 years.
Shading technology at cell level.

More safety.

Reduced risk of microcracks.
Protection against glass breakage thanks to
35 mm frame thickness.

More protection.

Insurance cover for the entire solar system
included for the first year.



WINAICO
Solar for Experts.

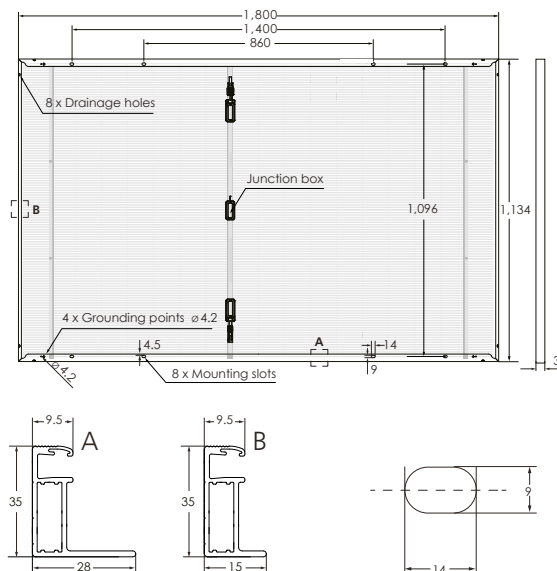
Mechanical Data WINAICO WST-BKX54 BACK CONTACT SERIES

Cell	Monocrystalline N-type, bifacial
Bifacility	40 + 5 %
Quantity of cells	108 (6 × 18 half cells)
Dimensions	1.800 × 1.134 × 35 mm
Weight	25 kg
Front glass	2.0 mm, highly transparent glass with anti-reflective coating
Encapsulation	EPE (EVA + POE + EVA)
Back glass	2.0 mm, highly transparent glass, partially black printed
Frame	Black anodised aluminium
Junction box	IP68, 3 bypass diodes
Connector type	Cable 2 × 1.2 m / 4 mm ² Stäubli MC4 Evo2A
Safety class	II (IEC 61140)
Fire safety class	A (IEC 61730)

Warranty

Product warranty	30 years
Performance warranty	30 years
Annual power degradation	0.35 %
Performance after 30 years	≥ 88.85 % of rated power
The warranty conditions apply.	

Dimensions in mm



Operating conditions

WST-500BKX54-B2

Operating temperature	°C	-40 bis +85
Maximum system voltage	V	1.500
Maximum series fuse I _R	A	25
Maximum test load (push/pull)	Pa	5.400/2.400
Maximum design load (push/pull)	Pa	3.600/1.600
Temperature coefficient of P _{MAX}	%/°C	-0,26
Temperature coefficient of V _{OC}	%/°C	-0,22
Temperature coefficient of I _{SC}	%/°C	0,05
Nominal module operating temperature NMOT	°C	45 ± 2

Electrical data

WST-500BKX54-B2

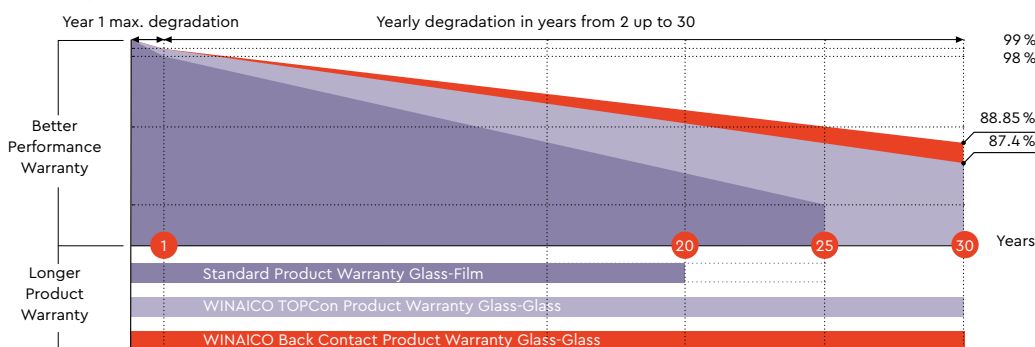
		STC ¹	NMOT ²
Nominal performance P _{MPP}	Wp	500	381
Voltage at maximum performance V _{MPP}	V	35,54	32,38
Current at maximum performance I _{MPP}	A	14,08	11,78
Open circuit voltage V _{OC}	V	40,84	38,38
Short circuit current I _{SC}	A	15,18	12,36
Module efficiency (STC)	%	24,5 (245 W/m ²)	
Increased performance through	10 % P _{MPP} W	550 (+50)	
Power Bifacility*	15 % P _{MPP} W	575 (+75)	
*Depending on irradiation conditions	20 % P _{MPP} W	600 (+100)	
Power tolerance	W	-0/+5	

¹ 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}: ±3 %, V_{OC}: ±3 %, I_{SC}: ±3 %.

² 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.

Warranty service



Certifications

IEC 61215:2021; IEC 61730:2023
IEC TS 62804-1 Anti-PID
IEC 61215-2 Hail Storm Resistance
(25 mm at ~23 m/s)

ISO 9001 Quality Management System
ISO 45001 Occupational Health and
Safety Management System
ISO 14001 Environment Management
System
SA 8000 Social Accountability

WEEE Registration number:
DE85493209



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