

Up to 415 watt

WST-MGX-P3 GEMINI Series

Top performance for all applications



PERFORMANCE
WARRANTY



www.winaico.com.au

WST-MGX-P3 GEMINI FULL BLACK

400 W / 108 Cells

WST-MGX-P3 GEMINI

410-415 W / 108 Cells



25 year product guarantee
Linear performance guarantee for 25 years



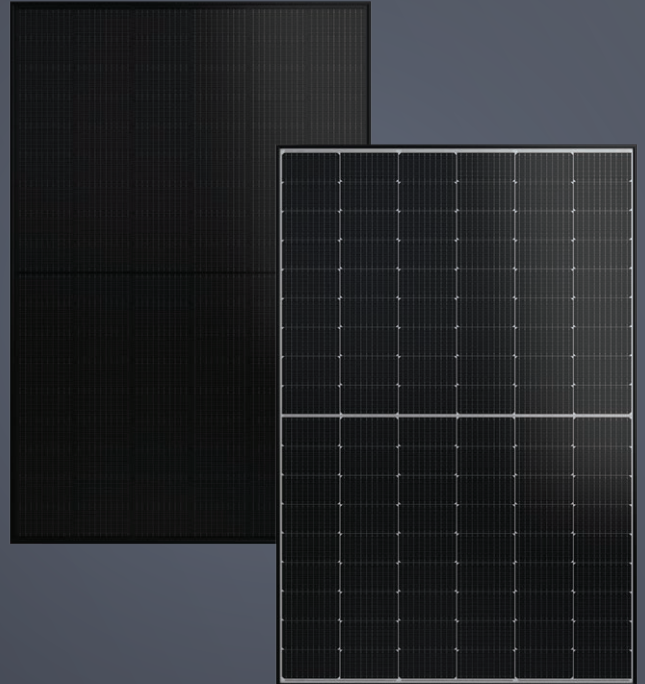
Advanced cell technology
Better performance in any weather



High-density module technology
Half cell and multi-busbar design to increase power yield



Improved temperature performance
Reduced internal resistance and module degradation



Greater Value

Premium quality from solar module specialists

A solar system is a long term investment, which should last for over 25 years. You want to be able to trust that the solar panels you install will perform for their whole life. WINAICO specialises in premium quality solar that you can rely on.

Greater Customer Satisfaction

Thousands of satisfied system owners worldwide

Established in 2008 WINAICO is one of the world's oldest solar manufacturers. Since inception we have focused on building close relationship with our customers. WINAICO stands for quality, reliability and customer engagement, values we apply every day in our business. Working closely with our customers builds trust and understanding, a feeling shared by thousands of satisfied customers worldwide.

Greater Protection

3 in 1 insurance for your complete system

Photovoltaic modules from WINAICO are characterised by outstanding quality, innovative design, durability and safety. In order to protect your system against property damage, operational interruption and reduced yields, we offer comprehensive all-round protection for your complete photovoltaic system when purchasing WINAICO modules.

Ask your installer to check if you qualify for free complimentary insurance.



Greater Quality Awarded By Customers

WINAICO is one of the few manufacturers to be awarded the EUPD Research "Top Brand PV" seal. The award centres around customer satisfaction from the performance of their solar systems in the real world. The EUPD Seal reflects WINAICO's customer focus and the positive consensus on lifetime performance.



Greater Durability Reliable Long Term Investment

WINAICO's solar panels are designed to last for a long time. They are backed by industry-leading 25-year product warranty to give you reliable and consistent returns.



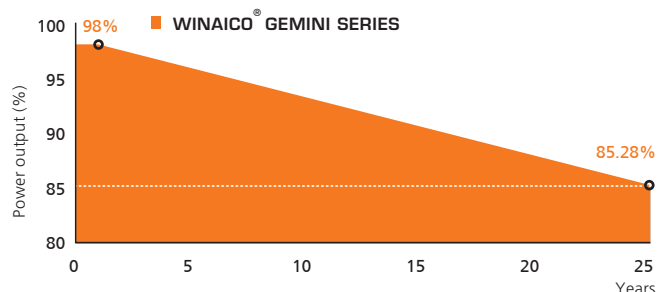
Greater Safety Tested to the Limits

WINAICO's modules are tested above and beyond international standards. Aiming to use lab conditions to simulate 25 years of service life, we push our modules to withstand conditions far above what they will likely experience on your roof. Be confident that your WINAICO panels will last the test of time.



Greater Performance Leading Module Technology

WINAICO combines half cell, multi-busbar and reflective wire designs to maximise efficiency and reduce internal resistance. The result is higher energy yield, lower module degradation, and market-leading 25 year power guarantee.



No more than 0.53% degradation per year from 2nd year to 25th year.



Greater Quality Control 100 % Inspection

We examine all cells and finished laminates for internal damage with a special electroluminescence test. In doing so, we can virtually eliminate all micro-cracks, hot spots, solder defects and other faults that cannot be seen with the naked eye. A type of "X-ray image" proves the 100% cell quality for each individual module, ensuring every WINAICO product is ready to perform on your roof.

Beyond Industry Standard Testing

Thermal Cycling (TC) Cycles between -40°C and +85°C	IEC Standard	200 cycles
	WINAICO	3 times IEC standard
Damp Heat (DH) Constant +85°C and 85% relative humidity	IEC Standard	1,000 hours
	WINAICO	3 times IEC standard
Mechanical Load (ML)	IEC Standard	2,400 Pa
	WINAICO	6,000 Pa
Hail Impact	IEC Standard	25 mm ice ball at 83 km/h
	WINAICO	35 mm ice ball at 100 km/h

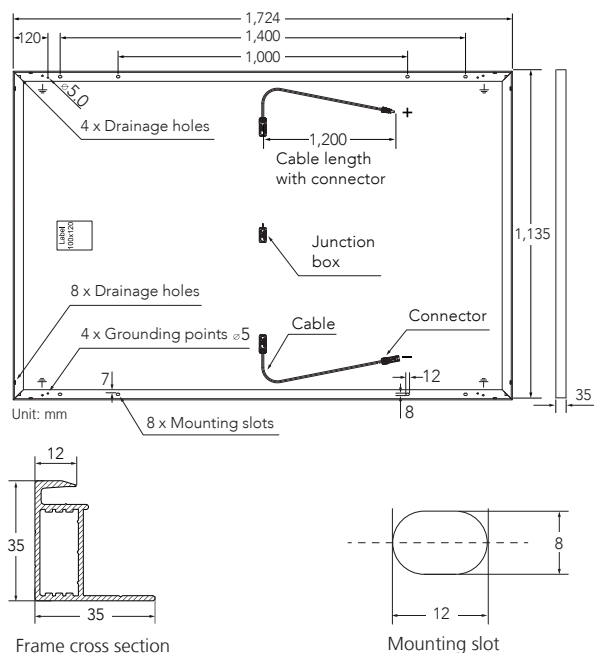
We test beyond the Industry testing standards because at WINAICO we believe that our customers deserve complete peace of mind.

Enhanced Voluntary Quality Testing

Potential Induced Degradation (PID) (IEC TS 62804-1:2015)	96 hours	1,000 V, 85°C, 85% relative humidity
Salt Mist (IEC 61701:2020)	Severity 6	40°C humid storage, 90% relative humidity, 56 days
Ammonia (IEC 62716:2013)	480 hours	20 cycles between 8 hrs of heating up and 16 hrs of cooling test sections

Our modules are voluntarily submitted to testing laboratories to push them to the absolute limits, guaranteeing your safety and return on investment.

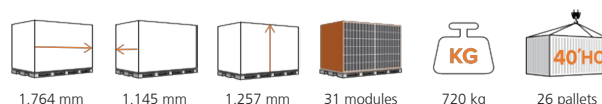
DIMENSIONS



MECHANICAL DATA WST-MGX-P3 GEMINI SERIES

Cell	Monocrystalline silicon cells
Quantity of cells	6 strings x 18 cells
Dimensions	1,724 x 1,135x 35 mm (67.87 x 44.69 x 1.38 in)
Weight	21.5 kg (47.4 lbs)
Glass thickness	3.2 mm (0.13 in)
Frame	Black anodised aluminium
Junction box	IP68
Connector type	MC4-EVO2 IP68
Module fire performance	Type 4
Fire safety class	C

PACKAGING



Operating conditions	WST-MGX-P3 Full Black	WST-MGX-P3
Operating temperature	-40°C to +85°C / -40°F to +185°F	-40°C to +85°C / -40°F to +185°F
Maximum system voltage IEC/UL	1,500V/1,500V	1,500V/1,500V
Maximum series fuse	25A	25A
Maximum design load (push/pull)	4,000 Pa / 2,700 Pa	4,000 Pa / 2,700 Pa
Maximum test load (push/pull)	6,000 Pa / 4,000 Pa	6,000 Pa / 4,000 Pa
Nominal module operating temperature NMOT	43.85 ± 3°C	43.85 ± 3°C
Temperature coefficient of P_{MAX}	-0.35 %/°C	-0.35 %/°C
Temperature coefficient of V_{OC}	-0.28 %/°C	-0.28 %/°C
Temperature coefficient of I_{SC}	0.04 %/°C	0.04 %/°C
Certifications	IEC 61215-1:2016, IEC 61215-2:2016, IEC 61730-1:2016, IEC 61730-2:2016	

Electrical data (STC)	WST-MGX-P3 Full Black	WST-MGX-P3
Nominal performance P_{MAX}	400	410 415
Voltage at maximum performance V_{MP}	30.71	30.93 31.05
Current at maximum performance I_{MP}	13.04	13.26 13.38
Open circuit voltage V_{OC}	37.29	37.32 37.34
Short circuit current I_{SC}	13.69	13.93 14.06
Module efficiency	20.44	20.95 21.21
Power tolerance	-0/+5	W

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 (NMOT)	WST-MGX-P3 Full Black	WST-MGX-P3
Nominal performance P_{MAX}	298	305 309
Voltage at maximum performance V_{MP}	28.79	28.95 29.03
Current at maximum performance I_{MP}	10.32	10.52 10.62
Open circuit voltage V_{OC}	34.98	35.02 35.04
Short circuit current I_{SC}	10.83	10.99 11.07

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.



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