

Up to 410 watt

# WST-MGX-P3 GEMINI Series

Top performance for all applications

25-Year  
Guarantee



*Power to Perform*

[www.winaico.com](http://www.winaico.com)

# WST-MGX-P3 GEMINI FULL BLACK

400 W / 108 Cells

# WST-MGX-P3 GEMINI

410 W / 108 Cells



**25 year product guarantee**  
Linear performance guarantee for 25 years



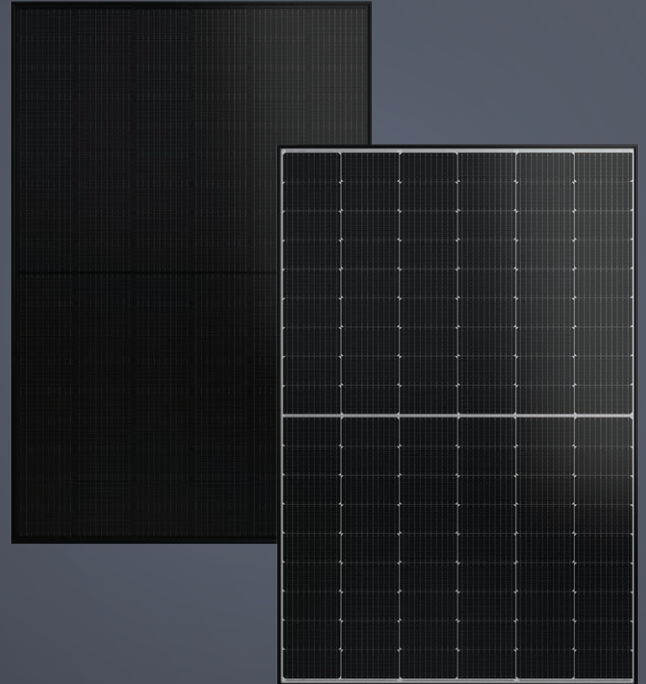
**Advanced cell technology**  
Better performance in any weather



**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.



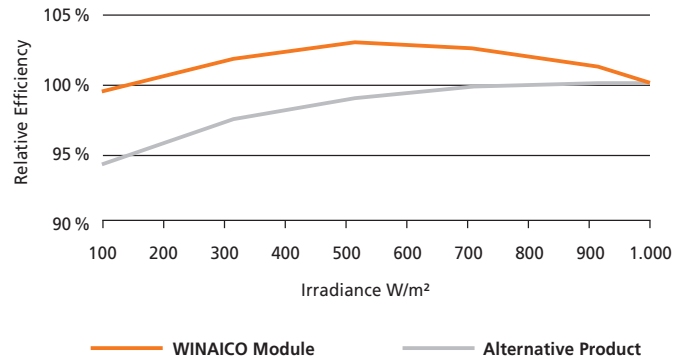
## Greater Safety Tested to the Limits

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 and lower module degradation.



## Greater Quality Control 100 % Inspection

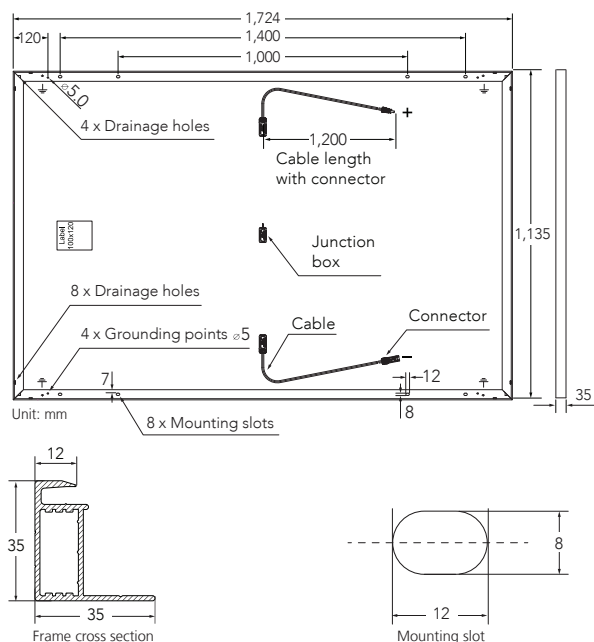
We examine all cells and finished laminates for internal damage with a special electroluminescence test. In doing so, we can virtually eliminate all micro-cracks, hot spots, solder defects and other faults that cannot be seen with the naked eye. A type of "X-ray image" proves the 100% cell quality for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

## Beyond Industry Standard Testing

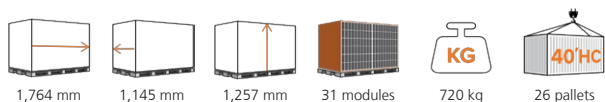
<b>Thermal Cycling (TC)</b> Cycles between -40°C and +85°C	IEC Standard	200 cycles
	WINAICO	3 times IEC standard
<b>Damp Heat (DH)</b> Constant +85°C and 85% relative humidity	IEC Standard	1,000 hours
	WINAICO	3 times IEC standard
<b>Mechanical Load (ML)</b>	IEC Standard	5,400 Pa
	WINAICO	Follow IEC standard
<b>Hail Impact</b>	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.

## DIMENSIONS



## PACKAGING



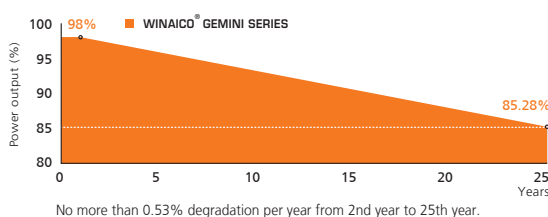
## MECHANICAL DATA WINAICO WST-MGX-P3 GEMINI SERIES

Cell	Monocrystalline silicon cells
Quantity of cells	6 strings x 18 cells
Dimensions	1,724 x 1,135 x 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	QC4.10 IP68 (MC4 compatible)
Module fire performance	Type 4
Fire safety class	C

## WINAICO PRODUCT WARRANTY

To activate 25-year product warranty for your installation, please register at <https://www.winaico.com/warranty-registration/>

## WINAICO PERFORMANCE GUARANTEE



Operating conditions	WINAICO WST-MGX-P3 Full Black	WINAICO 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	1,500 V/1,500 V	1,500 V/1,500 V
Maximum series fuse	25A	25A
Maximum design load (push/pull)	3,600 Pa/1,600 Pa	3,600 Pa/1,600 Pa
Maximum test load (push/pull)	5,400 Pa/2,400 Pa	5,400 Pa/2,400 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-400MGX-P3 Full Black	WST-410MGX-P3	
Nominal performance $P_{MAX}$	400	410	Wp
Voltage at maximum performance $V_{MP}$	31.06	31.30	V
Current at maximum performance $I_{MP}$	12.88	13.10	A
Open circuit voltage $V_{OC}$	37.29	37.32	V
Short circuit current $I_{SC}$	13.69	13.93	A
Module efficiency	20.44	20.95	%
Power tolerance	-0/+5		W

Electrical data applies under standard test conditions (STC): solar radiation 1,000 W/m<sup>2</sup> 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-400MGX-P3 Full Black	WST-410MGX-P3	
Nominal performance $P_{MAX}$	298	307	Wp
Voltage at maximum performance $V_{MP}$	28.42	29.32	V
Current at maximum performance $I_{MP}$	10.47	10.47	A
Open circuit voltage $V_{OC}$	34.90	35.35	V
Short circuit current $I_{SC}$	11.13	11.34	A

Electrical data applies under Nominal Module Operating Temperature (NMOT), irradiance of 800 W/m<sup>2</sup>, spectrum AM 1.5, ambient temperature 20 °C, wind speed 1 m/s.



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