

Up to 333 watt

WST-MG GEMINI Series

Top performance for all applications



PERFORMANCE
WARRANTY



COMPLIMENTARY
INSURANCE



www.winaico.com.au

WST-MG GEMINI

333 W / 108 Cells



Stable long term investment

Reliability you can bank on for 25 years



Advanced cell technology

Better performance in any weather



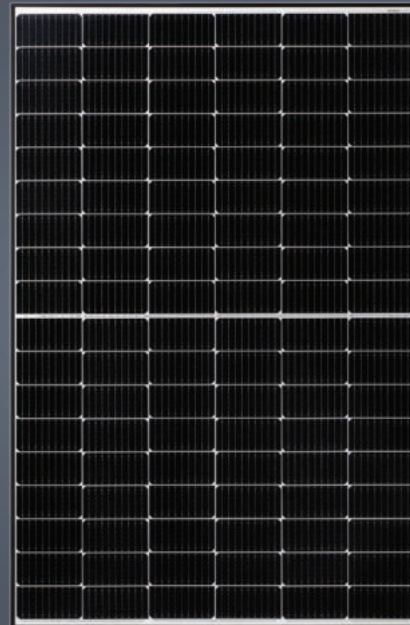
High-density module technology

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 20 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.



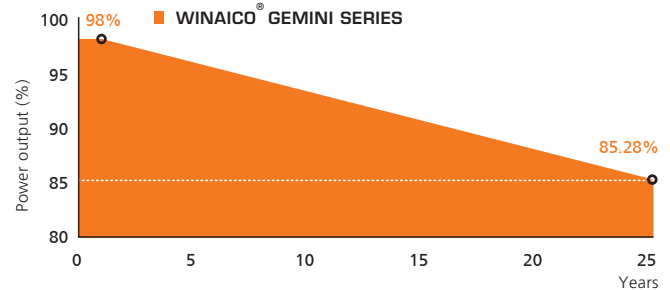
Greater Durability Reliable Long Term Investment

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 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 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 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 | 5,400 Pa |
| | WINAICO | Follow IEC standard |
| Hail Impact | IEC Standard | 25 mm ice ball at 83 km/h |
| | WINAICO | 35 mm ice ball at 100 km/h |

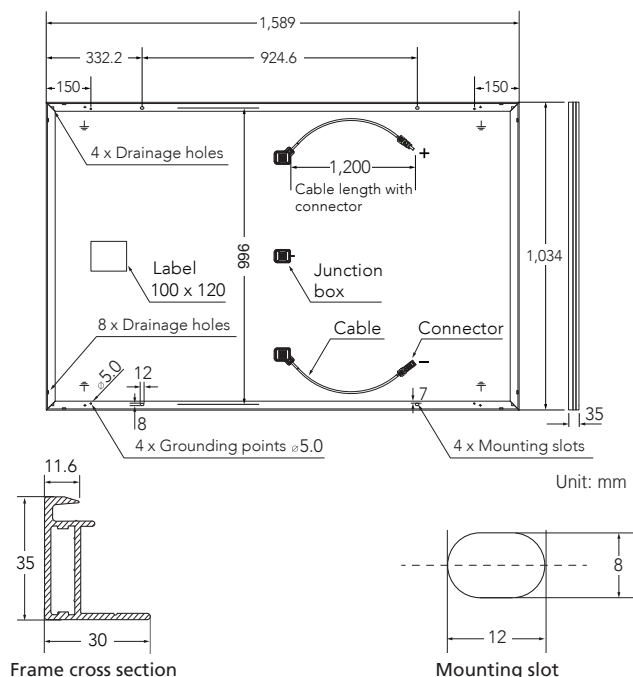
We test beyond the Industry testing standards because at WINAICO we believe that our customers deserve complete peace of mind.

Enhanced Voluntary Quality Testing

| | | |
|---|------------------------|---|
| Potential Induced Degradation (PID) (IEC TS 62804-1:2015) | 96hours | 1,000 V, 85°C, 85% relative humidity |
| Light and elevated Temperature Induced Degradation (LeTID) | Non-sensitive to LeTID | 0.55A, 75°C, 162 hours |
| Dynamic Mechanical Load (DML) (IEC TS 62782:2016) | 1000 Pa | 10 push to pull cycles/minute, for 1000 cycles |
| 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 WINAICO WST-MG GEMINI

| | |
|-------------------------|--|
| Cell | Monocrystalline silicon cells |
| Quantity of cells | 6 strings x 18 cells |
| Dimensions | 1,589 x 1,034 x 35 mm (62.56 x 40.71 x 1.38 in) |
| Weight | 18.6 kg (41 lbs) |
| Glass thickness | 3.2 mm (0.13 in) |
| Frame | Black anodised aluminium |
| Junction box | IP 68 |
| Connector type | MC4 IP 68 |
| Module fire performance | Type 4 |
| Fire safety class | C |

WINAICO PRODUCT WARRANTY

In order to activate our 25-year product warranty, please register your installation under <https://www.winaico.com/warranty-registration/>

| Operating conditions | WINAICO WST-MG |
|---|--|
| Operating temperature | -40°C to +85°C / -40°F to +185°F |
| Maximum system voltage IEC/UL | 1,000 V/1,000 V |
| Maximum series fuse | 20 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 | 43.85 ± 3°C |
| Temperature coefficient of P_{MAX} | -0.35 %/°C |
| Temperature coefficient of V_{OC} | -0.28 %/°C |
| Temperature coefficient of I_{SC} | 0.04 %/°C |
| Certifications | IEC 61215-1:2016, IEC 61215-2:2016, IEC 61730-1:2016, IEC 61730-2:2016 |

| Electrical data (STC) | WST-333MG | |
|---|-----------|----|
| Nominal performance P_{MAX} | 333 | Wp |
| Voltage at maximum performance V_{MP} | 30.80 | V |
| Current at maximum performance I_{MP} | 10.82 | A |
| Open circuit voltage V_{OC} | 36.72 | V |
| Short circuit current I_{SC} | 11.39 | A |
| Module efficiency | 20.27 | % |
| Power tolerance | -0/+5 | |

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-333MG | |
|---|-----------|----|
| Nominal performance P_{MAX} | 243 | Wp |
| Voltage at maximum performance V_{MP} | 28.28 | V |
| Current at maximum performance I_{MP} | 8.59 | A |
| Open circuit voltage V_{OC} | 34.60 | V |
| Short circuit current I_{SC} | 9.00 | A |

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.



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WINAICO®

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