

GEM SERIES: SS3MB250P/60

BLACK SAPPHIRE

250W POLYCRYSTALLINE MODULE

SS3MB250P/60 - BLACK SAPPHIRE

Designed for harsh and rugged climates, the **NEW Black Sapphire** 250W polycrystalline module delivers a high-quality, powerful performance.

Like the strength of a precious sapphire, this Tier 1 rated module is durable and built to last, and with its sleek black design offers a premium point of difference.

ANTI-REFLECTIVE NANOTECHNOLOGY

Specialised tempered glass coating maximises light penetration and reduces dust contamination

ANTI-PID TECHNOLOGY

Protection against potential induced degradation (PID) eliminates leakage currents and optimises cell performan

SLEEK PREMIUM BLACK DESIGN

For those customers looking for a point of difference, the black frame and backsheet proivde a stylish and sophisticated finish



TO PADE SCORE

THE A-GRADE ASSURANCE

A-Grade quality is like a rare gem, not often found in many panel products.

Sapphire Solar understands that building a high-quality solar

Tier 1 rated module is about being at the heart of the production

process and getting it right from the start.

Only our stringent quality assurance process delivers the Sapphire Solar A-Grade Assurance.

- A-Grade Components careful procurement of trusted and compliant components such as industry-leading solar cells, backsheets and encapsulants to suit high UV conditions.
- A-Grade Procedures daily raw material checks, production inspections and procedure checks to ensure our strict manufacturing parameters are maintained.
- A-Grade Testing stringent testing to ensure that every Sapphire Solar panel satisfies our strict performance and safety criteria.

A-GRADE FEATURES

UV-RESISTANT

BACKSHEET

- Premium sleek black design whilst maintaining excellent output
- Anti UV backsheet provides superior weather resistance and long-term durability
- PID-resistant encapsulants protect against UV discolouration and optimise light capture
- Anti-reflective tempered glass coating maximises penetration of light to solar cells
- Premium anti-PID cell technology produces a high module efficiency of up to 15.7%
- IP67 rated, fully sealed German junction box

A-GRADE WARRANTIES

Sapphire Solar 10/12/25 Warranty

- 10 year Product Warranty
- 12 year Performance Warranty at 90% power output
- 25 year Performance Warranty at 80% power output
- Premium Linear Performance
 Warranty

As Sapphire Solar is a 100% Australian owned manufacturer, all warranty claims are handled locally and efficiently through our Melbourne head office.









MECHANICAL CHARACTERISTICS

Solar Cells	Polycrystalline 156mm x 156mm (60 cells)
Dimensions	1640 x 992 x 35/40mm
Weight	19.0kg
Front Glass	3.2mm tempered, antireflective glass
Frame	Anodized/electrophoretic aluminium alloy
Cables	4.0mm2, symmetrical lengths 1.2m
Connector	Genuine MC4
Junction Box	IP67 rated

TEMPERATURE CHARACTERISTICS

Temperature Coefficient Pmax	-0.42%/°C
Temperature Coefficient Voc	-0.32%/°C
Temperature Coefficient Isc	+0.04%/°C
Operating temperature	-10°C~+85°C
NOCT (Nominal Operation Cell Temperature)	45°C ± 2°C











ELECTRICAL CHARACTERISTICS

Rated Power at STC (Pmpp)		250
Positive Power Tolerance		+5
Maximum Power at STC		253
Cell Efficiency		17.6 - 17.8
Minimum Module Efficiency (%)		15.4 - 15.7
Maximum Rated Power Voltage (Vmpp)		30.34
Maximum Rated Power Current (Impp)		8.24
Open Circuit Voltage (Voc)		37.47
Short Circuit Current (Isc)		8.76
Maximum System Voltage		1000 (TUV)
Maximum Series Fuse Rating		15A
Fire Rating		Class A

PACKAGING CONFIGURATION

Container	40"HQ
Pieces per Pallet	30
Pallets per Container	28
Pieces per Container	840



