

BIPV Rooftile Modules



High-efficiency Australian-Certified integrated photovoltaic (BIPV) module.

Building-

Provide savings in materials and electricity costs, reduce greenhouse gases, and add aesthetic architectural features to the building

Improve Building Sustainability

Create Cost-saving Opportunities

Mimic Building materials



Low carbon footprint



Aesthetic



Certified in Australia as a building material



Excellent thermal insulation



Durable and Shatter-proof



Energy saving

Rooftile modules

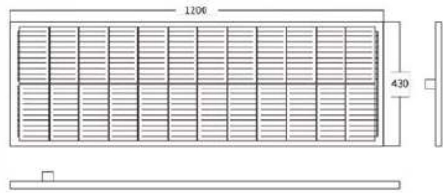


1260x480mm BIPV Rooftile modules

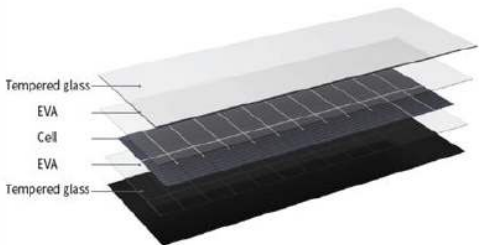
Product	AST-MS-RTB90	AST-MS-RTR75	AST-MS-RTG78
Colour	black	Red	Grey
Dimensions mm ²	1260x480	1260x480	1260x480
Weight, kg	8.5	8.5	8.5
Tempered Glass Structure, mm ²	3.2x3.2		
Mono-Si solar cell dimensions, mm ²	192x91		
Encapsulating material	EVA		
Junction box standard	IP67		
Cable type	900mm/4mm ²		
Plug	MC4		

Cell Assembly

Unit : mm



Material Structure



ELECTRICAL PERFORMANCE

Electrical parameters at Standard Test Conditions (STC)

	90	75	78.0
Power output, Pmax, W	90	75	78.0
Module efficiency, %	18.90%	15.80%	16.4%
Voltage at Pmax, Vmax, V	13.7	13.4	13.50
Current at Pmax, Imax, A	6.57	5.60	5.78
Open-circuit voltage, Voc, V	16.3	16.1	16.20
Short-circuit current, Isc, A	6.89	5.93	6.07

STC: 1,000 W/m² irradiance, 25°C cell temperature, AM1.5g spectrum

Colours



THERMAL CHARACTERISTICS

	NOCT	°C	45±2
Nominal operating cell temperature	NOCT	°C	45±2
Temperature coefficient of Pmax	γ	%/°C	-0.36
Temperature coefficient of Voc	βVoc	%/°C	0.30
Temperature coefficient of Isc	αIsc	%/°C	0.05

OPERATING CONDITIONS

Max.system voltage	1500V _{DC}
Max.series fuse rating	20A
Operating temperature range	(-40°C- 85°C)
Max.static load,front(e.g.,snow)	5400Pa
Max.static load,back(e.g.,wind)	2400Pa
Operating humidity	0-80%
Max. hailstone (diameter/velocity)	25mm / 23m/s

Warranty:

- 10 years materials and workmanship.
- 25 years power output guarantee for:
 - 90% of nominal output during 1st 10 years &
 - End-of-life modules will be collected &

QUALIFICATIONS & CERTIFICATES

IEC 61215, IEC 61730, 3C

• Due to continuous innovation, research and product improvement, the specifications in this product information sheet are subject to change without prior notice. The specifications may deviate slightly and are not guaranteed.

• The data do not refer to a single module and they are not part of the offer, they only serve for comparison with different module types.

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