

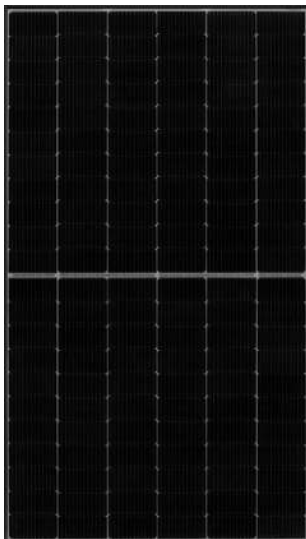
FUSION ENERGY DUAL SIDED SOLAR MODULE

Designed for powering the future today
FUSION ENERGY high density solar module dramatically amplifies energy conversion providing the highest system efficiency and space management

Featuring N-Type Heterojunction Cell technology, the Fusion module increases solar energy harvest by maximising low and oblique light performance

The Fusion solar module utilises a dual glass bifacial panel structure providing double sided power generation

Engineered in Australia the Fusion solar module has been designed to maximum engineering scrutiny and quality assurance to provide class leading reliability



Highest Performance

- N-Type HJT Cell technology
- Superior low and oblique light performance
- Split cell structure for higher shading tolerance
- Double sided power generation
- Parallel Circuitry maximises energy production

Engineered Durability

- Flexible cell connection technology
- Aerospace adhesive reinforce cell connections
- Dual glass structure for increased durability

Maximum Safety

- Low voltage parallel design
- Zero Potential Induced Degradation
- AC Module design optimisation

ELECTRICAL CHARACTERISTICS

Module Type	RE8612HDGDC-475	RE8612HDGDC-475	RE8612HDGDC-475
Test Method	STC	COMBINED WITH REAR (10%)	COMBINED WITH REAR (20%)
Max Power P _{MAX} (W)	475	522	570
Open Circuit Voltage, V _{OC} (V)	54.25	45.50	44.80
Short Circuit Current I _{SC} (A)	11.06	12.01	13.65
Max Power Voltage, V _{MPP} (V)	45.90	37.86	37.76
Max Power Current I _{MP} (A)	10.35	11.19	12.71
Module Efficiency (%)	21.85	24	26
STC	1000 W/m ² , 25°C, AM1.5		
NOCT	800 W/m ² , 20°C, AM1.5, wind speed 1m/s		

TEMPERATURE RATING (STC)

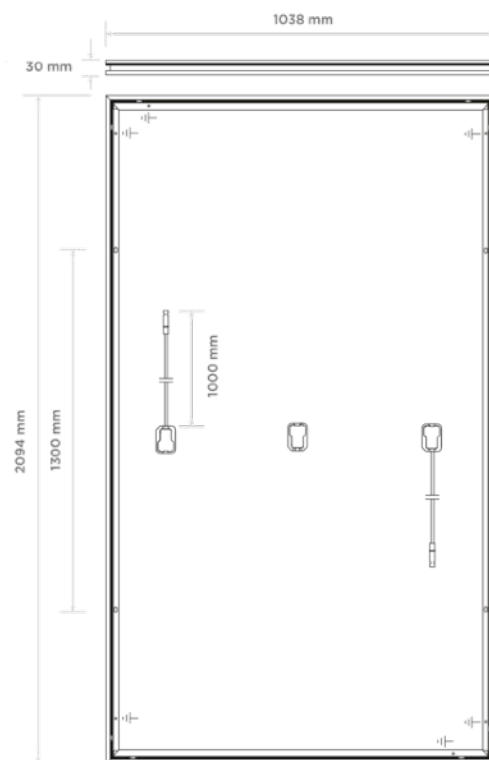
Temperature Coefficient of I _{sc}	+0.047% / °C
Temperature Coefficient of V _{oc}	-0.20% / °C
Temperature Coefficient of P _{MAX} (W)	-0.22% / °C

MECHANICAL LOADING

Front Side Design Load	5400 Pa 125 lb/ft ²
Rear Side Design Load	2400 Pa 50 lb/ft ²
Hail Impact Test	25 mm Hailstone at 23 m/s

MECHANICAL PARAMETERS

Cell Type	N-Type HJT 166x83mm
Junction Box	Tripple design IP68, 3 diodes
Cable Detail	4 mm ² 12 AWG, 1000 mm
Connector	Genuine MC4
Glass	3.2mm ARC Glass
Frame	Black Anodised Aluminium Alloy
Weight	27kg
Dimension	2094mm x 1038mm x 30mm



OPERATION PARAMETERS

Operational Temperature	-40°C ~ +85°C
Power Output Tolerance	-0 / +3%
Max System Voltage	DC 1500 V (IEC/UL)
Max Series Fuse Rating	20A
NOCT	45.7 +/- 2°C
Safety Class	Class II
Fire Rating	Class A / UL Type 1 or 2

WARRANTY

PRODUCT	25 YEARS
PERFORMANCE	25 YEARS



LINEAR POWER WARRANTY

