



S O L A R
E N E R G Y
S O L U T I O N S



SOLAFLEX[®] 125W

DATA SHEET

SOLAFLEX® 125W

Flexible CIGS Laminate strips are an innovative and perhaps the most integrated solar solution in the NZ market. The Solaflex® modules adhere directly to the pan of 'espan470' roof profile; once installed they present the significant aesthetic advantages of an integrated CIGS solution, with high efficiency output properties.

Compatibility

The Solaflex range is ideally suited to a swageless flat pan long run roofing profile to ensure optimum adhesion. Although variable in length, the Solaflex range has a fixed width of 348mm so this is the absolute minimum distance required in the roof pan; however wider pan spacing is recommended as it will minimise any shading effect. Unfortunately Solaflex is not compatible with standard Corrugate and trapezoid profiles. For further advice on compatible roof profiles please contact us.

Key features

- Record efficiency levels in a CIGS flexible form factor
- Low installed weight at less than 2.2 kg/m² (<0.5 lb/ft²)
- No penetrations, ballast or racking required
- Applicable for high wind load and high seismic hazard areas
- Bypass diodes reduce CIGS system shading losses
- Directly bonds to many approved surfaces

Electrical performance at stc¹

Nominal Power	P _{MPP}	[W]	125
Aperture Efficiency	η	[%]	16.4%
Power Output Tolerance		[W]	+5/-0
Maximum Power Voltage	V _{MPP}	[V]	30.0
Maximum Power Current	I _{MPP}	[A]	4.16
Open Circuit Voltage	V _{OC}	[V]	37.4
Short Circuit Current	I _{SC}	[A]	4.70
Maximum Series Fuse Rating		[A]	10
Maximum System Voltage	(IEC/UL)	[V]	1000/1000

¹Standard Test Conditions (STC): 1000 W/m², 25°C cell temperature, AM 1.5 spectrum

Thermal characteristics

NOCT	[°C]	48
Temperature Coefficient of P _{MPP}	[%/°C]	-0.38
Temperature Coefficient of V _{OC}	[%/°C]	-0.28
Temperature Coefficient of I _{SC}	[%/°C]	0.008

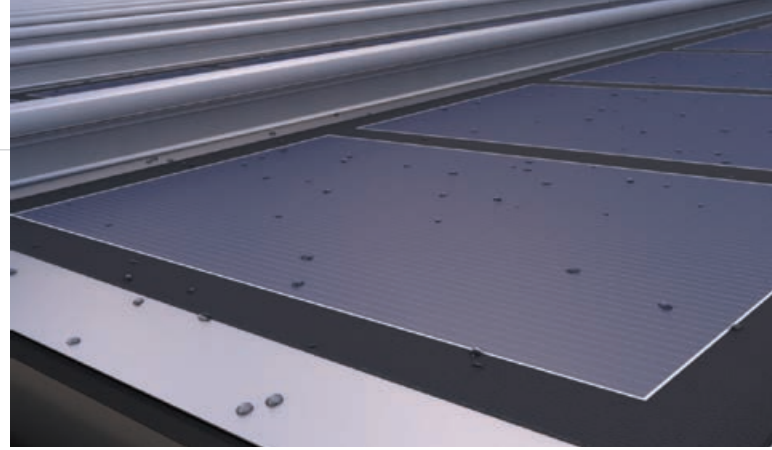
Physical and mechanical specifications

Length	2585 mm (101.8 in)
Width	348 mm (13.7 in)
Thickness, Maximum at J-Box*, Module	17 mm (0.7 in), 2.5 mm (0.1 in)
Weight (Module without adhesive)	1.6 kg (3.6 lb)
Weight (Module with adhesive)	1.9 kg (4.3 lb)
Weight/Area (Module without adhesive)	1.8 kg/m ² (0.4 lb/ft ²)
Weight/Area (Module with adhesive)	2.2 kg/m ² (0.5 lb/ft ²)
Junction Box Type	IP68
Cable Connections	Amphenol Technology Shenzhen (E346053)
Cell Type	Copper Indium Gallium Diselenide (CIGS)
Warranty**	5 year workmanship; 10/25 year power output
Certifications	UL 1703, IEC 61646, IEC 61730, cUL 1703, IEC 62716, Australia CEC, IEC 61701 (Salt Spray)
Packaging Info	15 modules per crate, 150 modules per pallet, 600 modules per 20' ISO container, 2400 modules per 40' ISO container

.5 mm (0.1 in) for the rest of the module with adhesive

.6 mm (0.06 in) for the rest of module without adhesive

*Please see full warranty for details



Reliability and safety

IEC 61646, IEC 61730, IEC 62716, Australia CEC, IEC 61701 (Salt Spray) UL 1703, cUL 1703

Warranty

5 year workmanship
10/25 year warranty against power loss

