

MiaSolé FLEX SERIES -02NS

CIGS Flexible Modules: High Power Density in a Flexible Form Factor

KEY FEATURES

- ▶ Record efficiency levels in a CIGS flexible form factor
- ▶ Low installed weight at less than 2.9 kg/m² (<0.6 lb/ft²)
- ▶ No penetrations, ballast or racking required
- ▶ Applicable for high wind load and high seismic hazard areas
- ▶ Bypass diode every two cells reduces PV system shading losses
- ▶ Directly bonds to many approved surfaces

RELIABILITY AND SAFETY

- ▶ IEC 61646, IEC 61730-1 & -2, IEC 61701, IEC 62716
- ▶ UL 1703, ULC ORD C1703, UL 2703

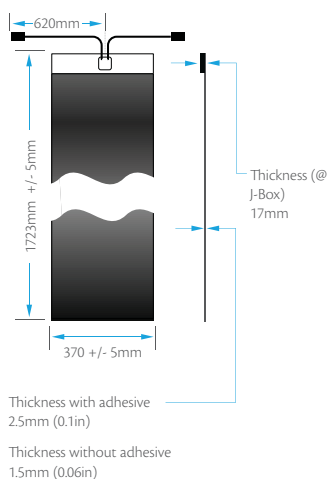
WARRANTY

- ▶ 5 year workmanship
- ▶ 10/25 year warranty against power loss



MiaSolé FLEX SERIES

FLEX-02NS SERIES CIGS MODULE



ELECTRICAL PERFORMANCE AT STC¹

			FLEX-02 65NS	FLEX-02 70NS	FLEX-02 75NS	FLEX-02 80NS	FLEX-02 85NS
Nominal Power	P_{MPP}	[W]	65	70	75	80	85
Aperture Efficiency	η	[%]	13.2%	14.2%	15.3%	16.3%	17.3%
Power Output Tolerance		[W]	+5/-0	+5/-0	+5/-0	+5/-0	+5/-0
Maximum Power Voltage	V_{MPP}	[V]	17.7	18.5	19.3	20	20.8
Maximum Power Current	I_{MPP}	[A]	3.67	3.79	3.89	3.99	4.09
Open Circuit Voltage	V_{OC}	[V]	23.2	23.7	24.3	24.8	25.3
Short Circuit Current	I_{SC}	[A]	4.47	4.49	4.52	4.55	4.58
Maximum Series Fuse Rating		[A]	10				
Maximum System Voltage	(IEC/UL)	[V]	1000/600				

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	1722±7 mm (67.8±.3in)
Width	363±13 mm (14.3±.5in)
Thickness, Maximum at J-Box*, Module	17 mm (0.7 in), 2.5mm (0.1 in)
Weight (Module without adhesive)	1.4 kg (3.0 lb)
Weight (Module with adhesive)	1.9 kg (4.1 lb)
Weight/Area (Module without adhesive)	2.1 kg/m ² (0.4 lb/ft ²)
Weight/Area (Module with adhesive)	2.9 kg/m ² (0.6 lb/ft ²)
Junction Box Type	IP68
Cable Connections	Amphenol H ₄
Cell Type	Copper Indium Gallium Diselenide (CIGS)
Warranty**	5 year workmanship; 10/25 year power output
Certifications	UL 1703, ULC ORD C1703, UL 2703, IEC 61646, IEC 61730-1 & -2, IEC 61701, IEC 62716, DEWA
Packaging Info	15 modules per crate, 150 modules per pallet, 1800 modules per 20' ISO container, 2400 modules per 40' ISO container

*2.5 mm (0.1 in) for the rest of the module with adhesive

**1.5 mm (0.06 in) for the rest of module without adhesive

**Please see full warranty for details



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Part Number 990-187757-00_5