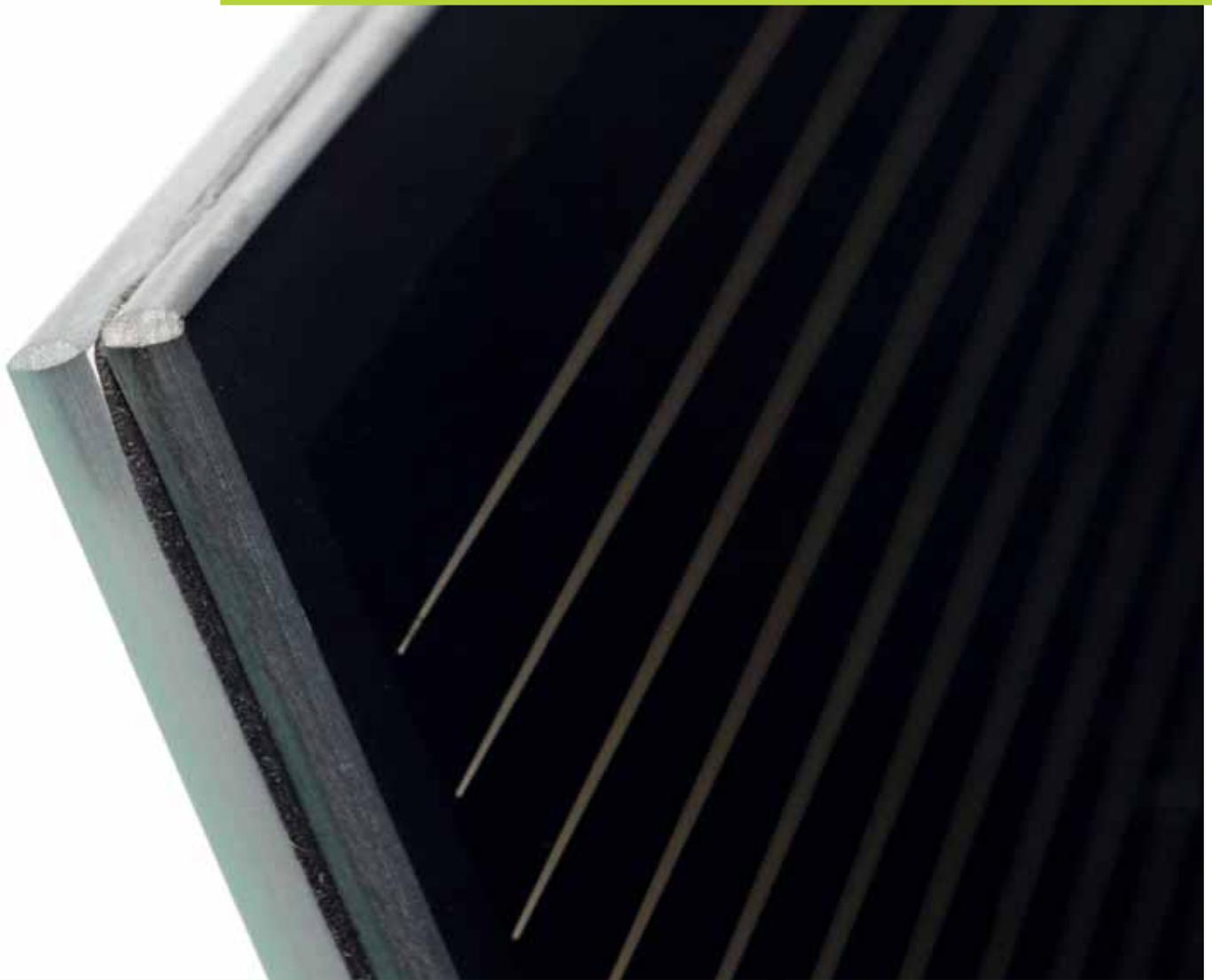


Original size

CDTE THIN FILM SOLAR MODULE CX3

The Calyxo CX series is a series of cost-efficient high performance modules. Based on innovative and patented CdTe thin film solar technology, the solar modules are designed to provide a significant reduction in the overall costs of electricity generation.



APPLICATION



Residential rooftop installation



Commercial and industrial installation



Roof-parallel and flat-roof installation



Ground mounted installation

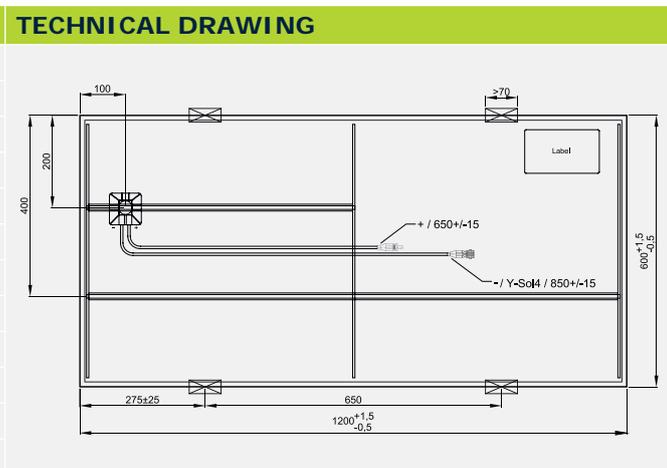
THE ALLROUNDER

- 1200x600mm module area
- Low temperature coefficients
- High performance ratio
- Positive sorting +2,5W/-0W
- Mounting options for every inclination - from roof top to ground mounted

WARRANTY

- 10-years product warranty
- 25-years performance warranty*
- Free module recycling through membership in the PV Cycle Association**

MECHANICAL SPECIFICATION	
Length x Width	1200 mm x 600 mm
Thickness	6.9 mm (21.0 including junction box)
Weight	12.0 kg
Front Cover	3.2 mm glass
Back Cover	3.2 mm glass
Cell Type	Cadmium telluride / Cadmium sulfide [CdTe/CdS]
Frame	none
Junction Box	Protection Class IP65
By-Pass Diode	none
Cable Length	650 mm (+Cable), 850 mm (-Cable)
Cable Type	Solar cable 1.5mm ²
Connector	Y-Sol4



ELECTRICAL CHARACTERISTICS

Performance at standard test conditions (STC: 1000W/m², 25°C, AM 1.5 Spectrum)¹

POWER CLASS		CX3	CX3 75	CX3 77	CX3 80	CX3 82	CX3 85
Nominal Power (+10% / -5%)	P _{MPP}	[W]	75.0	77.5	80.0	82.5	85.0
Current at max. Power	I _{MPP}	[A]	1.65	1.68	1.72	1.75	1.78
Voltage at max. Power	V _{MPP}	[V]	46.3	46.7	47.0	47.3	47.8
Short Circuit Current	I _{SC}	[A]	1.95	1.98	2.01	2.04	2.06
Open Circuit Voltage	V _{OC}	[V]	62.0	62.5	62.8	63.2	63.6

Performance at normal operating cell temperature (NOCT: 800 W/m², 40 ±2°C, AM 1.5 Spectrum)

POWER CLASS		CX3	CX3 75	CX3 77	CX3 80	CX3 82	CX3 85
Nominal Power	P _{MPP}	[W]	57.2	58.9	60.4	62.0	63.6
Current at max. Power	I _{MPP}	[A]	1.32	1.35	1.38	1.40	1.43
Voltage at max. Power	V _{MPP}	[V]	43.2	43.6	43.9	44.2	44.5
Short Circuit Current	I _{SC}	[A]	1.56	1.59	1.61	1.63	1.66
Open Circuit Voltage	V _{OC}	[V]	57.9	58.3	58.6	58.9	59.3

Performance at low irradiance

The typical relative change in module efficiency at an irradiance of 200W/m² in relation to 1000W/m² (both at 25°C and AM 1.5 spectrum) on request.

Temperature coefficients (at 1000W/m², AM 1.5 Spectrum)

Temperature I _{SC}	α	[%/K]	+0.02
Temperature V _{OC}	β	[%/K]	-0.24
Temperature P _{MPP}	γ	[%/K]	-0.25

¹⁾The power classes are defined by positive sorting (+2.5W/-0W) according to measured PMPP under STC. IMPP, VMPP, ISC, VOC are within ±10% of the indicated values under STC. Valid indoor measurement of STC performance is obtained by pretreating the module before measurement with 24 hour light soak (at approx. 1000W/m² in open circuit) followed by cool down to 25°C.

Properties for system design (IEC)

Maximum System Voltage	V _{sys}	[V]	1000
Maximum Reverse Current	I _R	[A]	4.0
Wind / Snow Load	p	[Pa]	2400
Safety Class			II
Fire Rating			B

YOUR DIRECT CONTACT TO THE SUN

QUALIFICATIONS AND CERTIFICATES

IEC 61646; IEC 61730; MCS; IEC 61701; IEC 62716; PV Cycle; CE-Mark; Safety Class II; ISO 9001:2008; ISO 14001:2004; OHSAS 18001:2007; ISO 50001:2011



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Note: Installation instructions must be followed. See the instruction and operating manual or contact the technical service for further information on approved installation and use of the product. Specifications subject to technical changes. Printed on environment-friendly paper. © Calyxo GmbH EU/ENG; CX3-IEC-Rev. 6, 10.2013