

CdTe THIN FILM SOLAR MODULE CX

Works harder without fatigue



- EXCELLENT PERFORMANCE AT LOW IRRADIANCE
- LOW TEMPERATURE COEFFICIENTS
- HIGH PERFORMANCE RATIO
- HIGH MOUNTING COMPATIBILITY DUE TO LOW GLASS OFFSET
- RECYCLING PROCESS

MECHANICAL SPECIFICATION

Length × Width	1200 mm × 600 mm
Thickness	6.9 mm (20.0 mm including junction box)
Weight	12.0 kg
Front Cover	3.2 mm glass
Back Cover	3.2 mm glass
Frame	None
Cell Type	Cadmiumtelluride / Cadmiumsulphide [CdTe/CdS]
Junction Box	Schutzart IP 65
By-Pass Diode	None
Cable Length	600 mm (+ cable) / 800 mm (- cable)
Connector	Multicontact MC4

ELECTRICAL CHARACTERISTICS

PERFORMANCE AT STANDARD TEST CONDITIONS (STC: 1000 W/m², 25°C, AM 1.5 SPECTRUM)

PRODUCT NAME			CX42	CX45	CX47	CX50	CX52	CX55	CX57
Nominal Power (+2.5/-0 Wp)	P _{max}	[W]	42.5	45.0	47.5	50.0	52.5	55.0	57.5
Short Circuit Current	I _{sc}	[A]	1.03	1.03	1.04	1.06	1.06	1.06	1.07
Open Circuit Voltage	V _{oc}	[V]	84.2	84.9	85.8	86.5	86.7	87.6	88.2
Current at Maximum Power	I _{mp}	[A]	0.76	0.79	0.81	0.83	0.86	0.87	0.90
Voltage at Maximum Power	V _{mp}	[V]	55.9	57.3	58.7	60.0	61.2	63.1	64.3

PERFORMANCE AT NORMAL OPERATING CELL TEMPERATURE (NOCT: 800 W/m², 50 ± 2°C, AM 1.5 SPECTRUM)

PRODUCT NAME			CX42	CX45	CX47	CX50	CX52	CX55	CX57
Nominal Power(+2.5/-0 Wp)	P _{max}	[W]	34.7	36.8	38.8	40.8	42.9	44.9	46.9
Short Circuit Current	I _{sc}	[A]	0.88	0.88	0.90	0.91	0.91	0.91	0.92
Open Circuit Voltage	V _{oc}	[V]	82.2	83.0	83.9	84.5	84.8	85.5	86.2
Current at Maximum Power	I _{mp}	[A]	0.67	0.69	0.71	0.74	0.75	0.77	0.79
Voltage at Maximum Power	V _{mp}	[V]	54.9	56.4	57.8	59.1	60.2	62.0	63.2

PERFORMANCE AT LOW IRRADIANCE

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

TEMPERATURE COEFFICIENTS (AT 1000 W/m², AM 1,5 SPECTRUM)

Temperature Coefficients of I _{sc}	α	[%/K]	+0.02
Temperature Coefficients of Voc	β	[%/K]	-0.24
Temperature Coefficients of P _{max}	γ	[%/K]	-0.25

1) Unless otherwise indicated, all measurement values given are nominal values with a tolerance of ±5 %. Valid indoor measurement of STC performance is obtained by pre-treating the modules before measurement by 1 hour light soaking (at about 1000 W/m² in open circuit) followed by cool down to 25°C.

PROPERTIES FOR SYSTEM DESIGN

Safety Class	II		
Maximum System Voltage	V _{sys}	[V]	1000
Maximum Reverse Current	I _r	[A]	2.0

See the Application Guideline and Mounting Instruction for further information on approved installation and use of this product.

QUALIFICATIONS AND CERTIFICATES

IEC 61646; IEC 61730 Application Class A; CE-Mark



Safety Class II

Q-CELLS MODULES

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