

# CIS SC Solar Panels

## Solar Frontier

new generation of thin-film solar panels

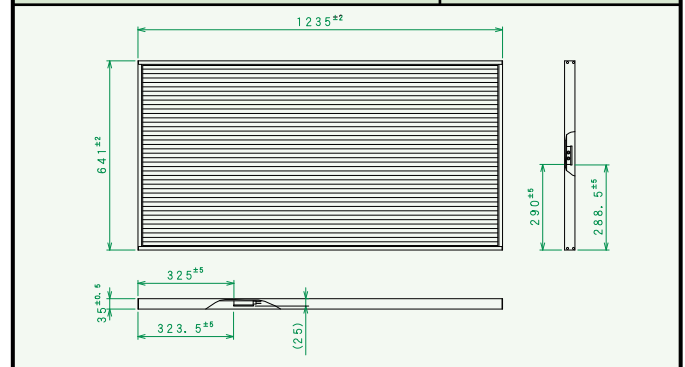


### SC75/80/85-EX-B

New CIS SC thin-film solar panels offering highest power and reliable performance for all operational conditions

- Our class-leading CIS SC technology is based on the combination of three elements, Copper, Indium and Selenium, to create a new generation of thin-film solar panels with great advantages over conventional crystalline silicon solar panels.
- We further preserve our natural environment by using absolutely no toxic substances such as lead or cadmium in the manufacture of our CIS SC solar panels. Furthermore, since their manufacture requires only a small amount of energy, our CIS SC range will be able to reduce the energy payback time by about 50% compared to crystalline silicon solar panels (source: NEDO).
- Exceptional performance under cloudy, low light conditions. Due to the excellent spectral response, our CIS SC solar panels can absorb a wider portion of the light spectrum, unlike crystalline silicon panels.
- Shade tolerance offering reliable power in adverse situations. The unique patterning reduces the effect of partial shades, keeping the panel's output drop to a minimum.
- The all-black CIS SC solar panels are the ideal solution for integration in buildings and other application with demanding visual appearance.
- Highly transparent tempered glass allows more light to reach the cells and ensures high impact resistance and protection against hail, snow, ice and storms.
- Unsurpassed quality, excellent efficiency and stable output power delivering reliable high performance for many years.
- Fully made in Japan in automated single-line production facilities. Manufacturing experience since 1983. 80MW factory capacity, expanding to 1GW in 2011.
- Certified according to IEC61646 / IEC61730 and listed as eligible for government rebates in Australia.

Model		75	80	85
<b>Electrical Characteristics</b>				
Maximum power (Pm)	(W)	75	80	85
Tolerance	(%)	+7 / -5		
Voltage at maximum power (Vmpp)	(V)	40.5	41	42.5
Current at maximum power (Impp)	(A)	1.85	1.95	2.0
Open circuit voltage (Voc)	(V)	55.5	56.5	57.5
Short circuit current (Isc)	(A)	2.2	2.26	2.3
Maximum system voltage (Voc-sys)	(V)	1,000		
Maximum reverse current	(A)	7		
Temperature coefficients	(%/°C)	Pm -0.33 / Voc -0.34 / Isc 0.0		
NOCT	(°C)	47		
<b>Mechanical Characteristics</b>				
Length	(mm)	1235		
Width	(mm)	641		
Depth including junction box	(mm)	35		
Weight	(kg)	12.4		
Output cables		2.5mm <sup>2</sup> with MC4 connectors		
Operating temperature	(°C)	-40 to +85		



Electrical specifications are at Standard Test Conditions (STC): irradiance level 1000W/m<sup>2</sup>, spectrum AM 1.5 and cell temperature 25 °C. Specifications subject to change without notice.

Available from:

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