

SilexSolar Photovoltaic Panels

240/245/250/255/260/265/270 Watt



SilexSolar
Australian Clean Energy

Australian Made SilexSolar 240/245/250/255/260/265/270 Watt Panels

SLX Series Panels

The Silex Solar SLX is a high power mono-crystalline solar module that incorporates anti-reflective coated cells and glass to generate more energy (kWh per kW) in your installation.

High efficiency cells combined with a unique low volume high strength frame result in very high power density and aperture efficiency with best in class energy generation.

Quality and Safety

The module has undergone the most rigorous testing to ensure reliable long term performance and is certified to comply with stringent safety and performance standards (IEC61730 and IEC61215).

Four bypass diodes, one per 24 cells, are incorporated in the junction box to provide maximum protection for the cells when the module is shaded to ensure long term reliability.

You know what you're getting with SilexSolar

Quality Solar Panels:

- ✓ Made in Australia for Australian Conditions
- ✓ Supplied direct to Australian Retailers
- ✓ Extended Warranty with in field support
- ✓ Long term reliability and output



Clean Energy Council
MEMBER



SilexSolar SLX Series 240/245/250/255/260/265/270 Watt Photovoltaic Panels

SLX Performance	SLX240	SLX245	SLX250	SLX255	SLX260	SLX265	SLX270
Rated Power	240W	245W	250W	255W	260W	265W	270W
Tolerance	± 3%	± 3%	± 3%	± 3%	± 3%	± 3%	± 3%
Nominal Voltage	32V	32V	32V	32V	32V	32V	32V
Maximum System Voltage	1000V DC	1000V DC	1000V DC	1000V DC	1000V DC	1000V DC	1000V DC
Protection Classification	II	II	II	II	II	II	II
Limiting Reverse Current, IR	5.42A	5.47A	5.53A	5.58W	5.64A	5.69A	5.74A
Panel Efficiency	14.4%	14.7%	15.0%	15.3	15.6%	15.9%	16.2%
Maximum series fuse rating	10A	10A	10A	10A	10A	10A	10A

Warranty* 90% power output over 12 years 80% power output over 25 years

Free from defects in materials and workmanship for 10 years. *Refer to SilexSolar's Warranty document for terms & conditions

Electrical Data	1000W/m ² (STC ¹)	SLX240	SLX245	SLX250	SLX255	SLX260	SLX265	SLX270
Maximum Power (P _{max})	(P _{max})	240W	245W	250W	255W	260W	265W	270W
Voltage at P _{max} (V _{mp})	(V _{mp})	47.6V	48.2V	48.7V	49.1V	49.6V	50.1V	50.6V
Current at P _{max} (I _{mp})	(I _{mp})	5.04A	5.09A	5.14A	5.19A	5.24A	5.29A	5.34A
Short Circuit Current (I _{sc})	(I _{sc})	5.42A	5.47A	5.53A	5.58A	5.64A	5.69A	5.74A
Open Circuit Voltage (V _{oc})	(V _{oc})	59.2V	59.7V	60.2V	60.7V	61.1V	61.6V	62.1V
Efficiency Reduction at 200W/m ²	<3%							
Temperature coefficient of I _{sc}	(0.065±0.015)%/°C							
Temperature coefficient of V _{oc}	-(0.36±0.05)%/°C							
Temperature coefficient of P _{max}	-0.45%/°C @ NOCT							

NOCT (Nominal Operating Cell Temperature) - Cell operating temperature at 800W/m² irradiance in plane of panel, panel temperature 20°C wind speed 1m/s

Mechanical Data

Solar cells	96 mono-crystalline 125mm x 125mm connected in series
Front glass	High transmission 3.2mm tempered anti-reflective solar glass
Cell encapsulant	EVA
Back	White polyester
Frame	Black anodised aluminium
Diodes	Low loss Schottky bypass diodes mounted in junction box one for every 24 cells
Junction box	Dimensions 151mm(l) x 140mm(w) x 25mm(h) protection (IP65)
Output cables	4mm ² cable with weatherproof multi-contact connectors with 1002mm length cables.
Dimensions	1588mm(l) x 1051mm(w) x 40mm(d)
Weight	19kg

Qualification Test Parameters

Thermal cycling test	-40°C to +85°C for 200 cycles
Damp heat test	+85°C at 85% relative humidity for 1000 hours
Front and rear static load test	2400Pa equivalent to a wind pressure of 130km/h ⁻¹
Hailstone impact test	25mm diameter hailstones at 23m/s ⁻¹ from 1m
Bypass diode thermal test	One hour at 1.25 times I _{sc} and 75°C

Quality and Safety

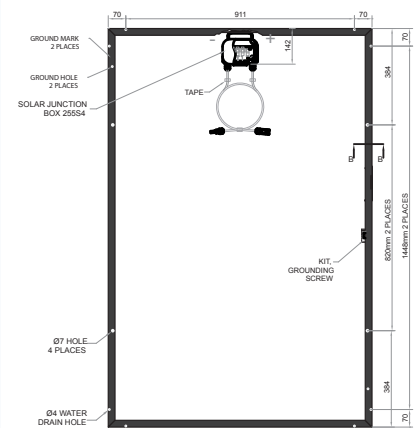
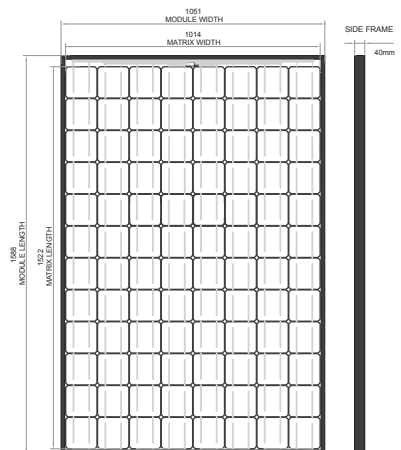
Conforms to European directives

Certified according to the extended version of the IEC 61215:2005 (Crystalline silicon terrestrial photovoltaic modules design qualification and type approval)

Certified according to IEC61730-1 and IEC61730-2 (Photovoltaic modules safety qualification, requirements for construction and testing)

Module electrical measurements are calibrated to World Radiometric Reference via third party international laboratories

This data sheet complies with the requirements of EN50380:2003



CE 2006/95/EC EN 61730-1:2007, EN 61730-2:2007 and EN 61215:2005

Note 1 - STC (Standard Test Conditions): 1000W/m² irradiance in plane of panel, panel temperature 25°C and a spectral distribution of irradiance according to air mass 1.5

Document No.: PB00080 Revision: 1
Effective Date: 14/07/2011 Ref.: 11-MoC-070



SilexSolar
Australian Clean Energy

Silex Solar Pty Ltd ABN: 91 124 926 085

PO Box 121 Concord West NSW 2138 T: +61 2 9704 8888 F: +61 2 9704 8800
2 Australia Avenue, (Sydney Olympic Park) Homebush Bay NSW 2127 Australia
Website: www.SilexSolar.com