



SilexSolar
Australian Clean Energy

SilexSolar 180/175/170 Watt Photovoltaic Modules



SilexSolar 180/175/170 Watt Modules

SLX Series Modules

The SilexSolar SLX Series is a high power monocrystalline solar module range that incorporates anti-reflective coated cells and glass to generate more energy (kWh per kW) in your installation.

The modules have 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 respectively as certified by TÜV Rheinland. Three bypass diodes, one per 24 cells, are incorporated in the junction box to provide protection for the cells when the module is shaded to ensure long term reliability.

Quality and Safety

Conforms to European directives TÜV certified according to the extended version of the IEC61215:2005 (Crystalline silicon terrestrial photovoltaic modules design qualification and type approval) TÜV certified according to IEC61730-1 and IEC61730-2 (Photovoltaic modules safety qualification, requirements for construction and testing). Module electrical measurements are calibrated.

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



SilexSolar SLX Series 170/175/180 Watt Photovoltaic Modules

SLX Performance	SLX170	SLX175	SLX180
Rated Power	170W	175W	180W
Tolerance	± 3%	± 3%	± 3%
Module Efficiency (1000W/m ² 25°C)	13-14%	14-15%	14-15%
Nominal Voltage	24V	24V	24V
Maximum System Voltage	1000V DC	1000V DC	1000V DC
Protection Classification	II	II	II
Limiting Reverse Current, IR	5.19A	5.34A	5.48A
Maximum series fuse rating	10 A	10 A	10 A
Warranty*	90% power output over 12 years: 80% power output over 25 years Free from defects in materials and workmanship for 5 years. *Refer to Silex Solar's Warranty document for terms and conditions		

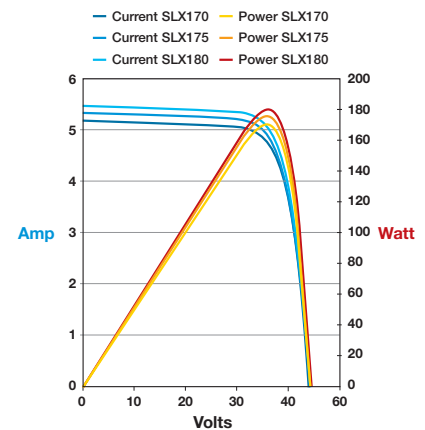
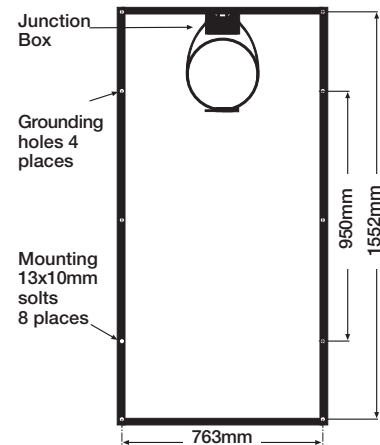
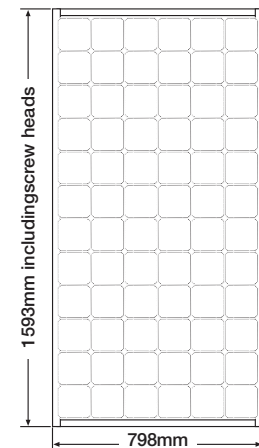
Electrical Data	1000W/m ² @ STC	SLX170	SLX175	SLX180
Maximum Power	(Pmax)	170W	175W	180W
Voltage at Pmax	(Vmp)	36.00V	36.00V	36.00V
Current at Pmax	(Imp)	4.73A	4.87A	5.00A
Short Circuit Current	(Isc)	5.19A	5.34A	5.48A
Open Circuit Voltage	(Voc)	44.2A	44.2A	44.30V
Temperature coefficient of Isc	(0.065±0.015)%/°C			
Temperature coefficient of Voc	-(0.36±0.05)%/°C			
Temperature coefficient of P	-(0.5±0.05)%/°C			

Mechanical Data

Solar cells	72 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	Clear anodised silver matt aluminium
Diodes	Low loss Schottky bypass diodes mounted in junction box one for every 24 cells
Junction box	Dimensions 129mm(l) x 94mm(w) x 16mm(h) potted (IP67)
Output cables	4mm ² cable with weatherproof multi-contact connectors with 1000mm length cables.
Dimensions	1593mm(l) x 798mm(w) x 48mm(h)

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
Hailstone impact test	25mm diameter hailstones at 23m/s from 1m
Bypass diode thermal test	One hour at Isc and 75°C
	One hour at 1.25 times Isc and 75°C



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



SilexSolar
Australian Clean Energy

Silex Solar Pty Ltd ABN: 91 124 926 085
PO Box 121 Concord West NSW 2138
Switchboard: +61 2 9704 8888 Fax +61 2 9704 8800
Sales Enquiries: +61 2 9704 8866
Address: 2 Australia Avenue, Sydney Olympic Park, NSW 2127 Australia
Website: www.SilexSolar.com

Document Number:
SLX Series 1

Effective Date:
25th March 2010

Revision:
SLX Series 1