

QST-100

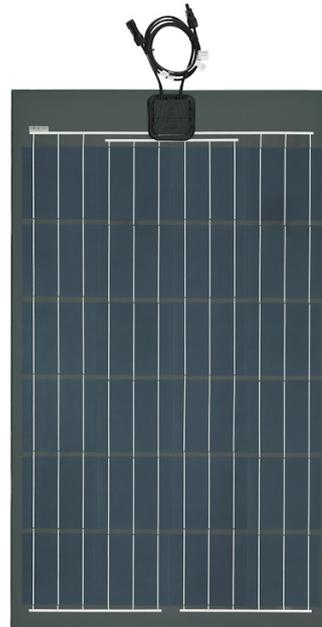
- 3mm thick
- 4.5kg
- Installs in seconds

HST - Heat Sink Technology

Since the inception of solar cells and solar panels, there has been an ongoing effort to increase efficiency. The main effort was concentrated in increasing the efficiency of solar cells, something which was achieved but with a significant increase in cost. In general, high-efficiency cells are up to 25% more expensive than lower-efficiency cells, although even then the final panel output does not change; only the panel area changes.

A higher-efficiency panel requires less area than a lower-efficiency panel to produce the same power. The differences in area are usually of the order of 5%, something that is insignificant in most cases.

QSOLAR developed its second-generation panels by incorporating a heat sink in the substrate, without increasing the cost. As a result, QSOLAR panels run cooler than glass panels, especially in hot climates. QSOLAR HST reduces the temperature of the cells in a solar panel by up to 10°C in comparison to glass panels. In this way, QSOLAR panels produce **up to 5% more power than any other glass panel with the same type of cells**. To put it a simpler way, instead of increasing the cell efficiency at a higher cost, QSOLAR has increased the efficiency of the end product, the solar panel, without any increase in the cost at all. And this is applicable to panels using any type of cell.



- ✓ The world's thinnest panel
- ✓ No EVA, no TPT and no glass
- ✓ 10x the impact strength of glass
- ✓ No earthing required
- ✓ No exposed metal parts
- ✓ PID-free
- ✓ 10-year product warranty
- ✓ Available in any color

About the QST-100W

The QST-100 is a new polycrystalline panel, of similar size to thin-film panels, but a third of the weight, and less than half the thickness. Already cheaper than thin-film, final costs are further reduced thanks to the weight and the ease with which it can be put in place. The QST-100 can be installed with or without clamps, in seconds.

QSOLAR modules are encapsulated with our patented SPRAYTEK99® material, which offers better protection than glass and EVA. Using this material, we are able to produce lightweight, flexible, impenetrable panels with no exposed metal parts, of any size, power and color.

General Specifications	
Length (mm)	1160
Width (mm)	670
Depth (mm)	3
Weight (kg)	4.7
Number of Cells	24
Electrical Specifications	
P _{max} (W)	100
V _{mp} (V)	12.8
I _{mp} (A)	8.2
V _{oc} (V)	14.9
I _{sc} (A)	8.7
Number of Bypass Diodes	2
Power Tolerance	+5%
Maximum System Voltage (V)	1000
Fuse Rating (A)	15
Component Data	
Cell Type	Polycrystalline silicon
Cell Dimensions (mm)	156 x 156
Frame	None
Encapsulant	Spraytek99® ESS®
Backsheet	Aluminium
Junction Box	IP67 Class II (IEC/UL Certified)
Output Cables	1.2 m, 6 mm ² PV Cable (IEC/UL Certified)
Connectors	MC4 IP67 (IEC/UL Certified)
Temperature Coefficients	
P _{max} (%/°C)	-0.43
V _{mp} (%/°C)	-0.43
I _{mp} (%/°C)	-0.019
V _{oc} (%/°C)	-0.32
I _{sc} (%/°C)	+0.04



About QSOLAR

QSOLAR is a leading innovator in solar panel technology, bringing about the first major change in solar panel manufacturing since the inception of the industry some 60 years ago. Visit WWW.QSOLAR.NET to find out more.

QSOLAR Limited is a Canadian company headquartered in Calgary (Alberta) and listed on the Canadian Stock Exchange (CSE) under the symbol QSL (www.cnsx.ca).

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