

## The QSF-P by QSOLAR



- ✓ The most flexible silicon panel ever
- ✓ No EVA, no TPT and no glass
- ✓ 10-year product warranty
- ✓ Less than 5mm thick
- ✓ Bends to a 30° angle
- ✓ PID-free polymer substrate
- ✓ No exposed metal parts
- ✓ No earthing required

### About the QSF-P

The QSF-P from QSOLAR is our extremely thin and lightweight state-of-the-art flexible crystalline panel, bringing a high-efficiency and easy-to-install solar solution to any surface up to a curvature of 30°.

According to our signature Z-stress design, the module is built specifically to withstand distortion not only by bending but also by material contraction and expansion caused by temperature variation. For this reason, the QSF-P can cope with extreme temperatures, from -40 to 90°C. In doing so, it keeps residual stresses to a minimum, extending the expected lifetime of the panel up to and even beyond 25 years.

The QSF-P incorporates UV-reflective technology to maintain constant cell temperature. High-quality custom-made silver tab ribbons further help to eliminate resistive losses.

All QSOLAR modules are encapsulated with our patented SPRAYTEK® 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, any power and any colour.

Model	QS 60 QSF-P	QS 120 QSF-P	QS 150 QSF-P
<b>General Specifications</b>			
Length (mm)	789	1405	1669
Width (mm)	678	678	678
Depth (mm)	4.5	4.5	4.5
Weight (kg)	2.6	4.6	5.4
Number of Cells	32	60	72
<b>Electrical Specifications</b>			
Pmax (W)	60	120	150
Vmp (V)	16.7	31.4	37.7
Imp (A)	4.05	4.05	4.05
Voc (V)	20.1	37.7	45.2
Isc (A)	4.32	4.32	4.32
Module Efficiency	11.2%	12.6%	13.3%
Number of Bypass Diodes	3	3	3
Power Tolerance		+5%	
Maximum System Voltage (V)		1000	
Fuse Rating (A)		15	
<b>Component Data</b>			
Cell Type	Polycrystalline silicon		
Cell Dimensions (mm)	78 x 156		
Frame	None		
Encapsulant	Spraytek99® ESS®		
Backsheet	Polymer		
Junction Box	IP67 Class II (IEC/UL Certified)		
Output Cables	1.2 m, 6 mm, PV Cable (IEC/UL Certified)		
Connectors	MC4 IP67 (IEC/UL Certified)		
<b>Temperature Coefficients</b>			
Pmax (%/°C)	-0.43		
Vmp (%/°C)	-0.43		
Imp (%/°C)	-0.019		
Voc (%/°C)	-0.32		
Isc (%/°C)	+0.04		

### Local Distributor Information:



## About QSOLAR

QSOLAR is a leading innovator in solar panel technology, with a wide range of products designed to meet the needs of any solar power application. Visit us at [WWW.QSOLAR.NET](http://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](http://www.cnsx.ca)).

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