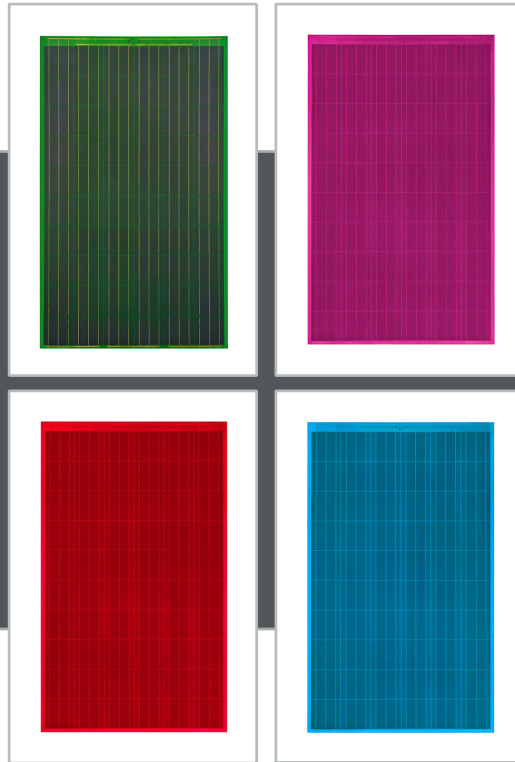


The Full-Color **QS-R** by QSOLAR



- ✓ High-efficiency silicon modules
- ✓ No EVA, no TPT and no glass
- ✓ 10-year product warranty
- ✓ Available for all standard QSOLAR panels
- ✓ 10x the impact strength of glass
- ✓ PID-free
- ✓ No exposed metal parts
- ✓ No earthing required

About the QSOLAR QS-R

The QS-R is a range of full-color silicon panels, made possible thanks to QSOLAR's innovative and highly advanced methods of solar-module manufacturing.

QS-R panels are a vibrant alternative to other standard QSOLAR module ranges. The QLX-R, the QSS-R and the QSF-R all maintain the respective mechanical properties of the lightweight QLX, the ultra-thin, sturdy QSS and the flexible QSF, but do so in full vivid color.

All this is made possible thanks to our proprietary SPRAYTEK99® manufacturing process, which offers better protection than glass and EVA. Using this process, QSOLAR is able to produce lightweight, flexible, impenetrable panels with no exposed metal parts, of any size, any power and any colour.

HST - Heat Sink Technology

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.

Model	QS 165 QLX-R	QS 165 QSS-R	QS 165 QSF-R	QS 240 QLX-R	QS 240 QSS-R	QS 240 QSF-R
General Specifications						
Length (mm)	1661	1661	1805	1819	1819	1971
Width (mm)	994	1000	994	994	1000	994
Depth (mm)	16.5	10.5	4	16.5	10.5	4
Weight (kg)	15.3	20.3	10.4	22.1	22.0	11.4
Number of Cells	60	60	60	66	66	66
Electrical Specifications						
Pmax (W)	165	165	165	240	240	240
Vmp (V)	28.4	28.4	28.4	31.9	31.9	31.9
Imp (A)	5.85	5.85	5.85	6.04	6.04	6.04
Voc (V)	31.7	31.7	31.7	35.4	35.4	35.4
Isc (A)	6.24	6.24	6.24	6.51	6.51	6.51
Module Efficiency	10.0%	9.9%	9.2%	13.3%	13.2%	12.3%
Number of Bypass Diodes	3	3	3	3	3	3
Power Tolerance				+5%		
Maximum System Voltage (V)				1000		
Fuse Rating (A)				15		
Component Data						
Cell Dimensions (mm)	156 x 156					
Cell Type	Polycrystalline silicon			Monocrystalline silicon		
Frame	None / Ultra-thin polymer					
Backsheet	HST Aluminium/ACP					
Edge Protection	Thin polymer channel / Edge-sealant adhesive tape					
Encapsulant	Spraytek99® ESS®					
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)					
Temperature Coefficients						
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 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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