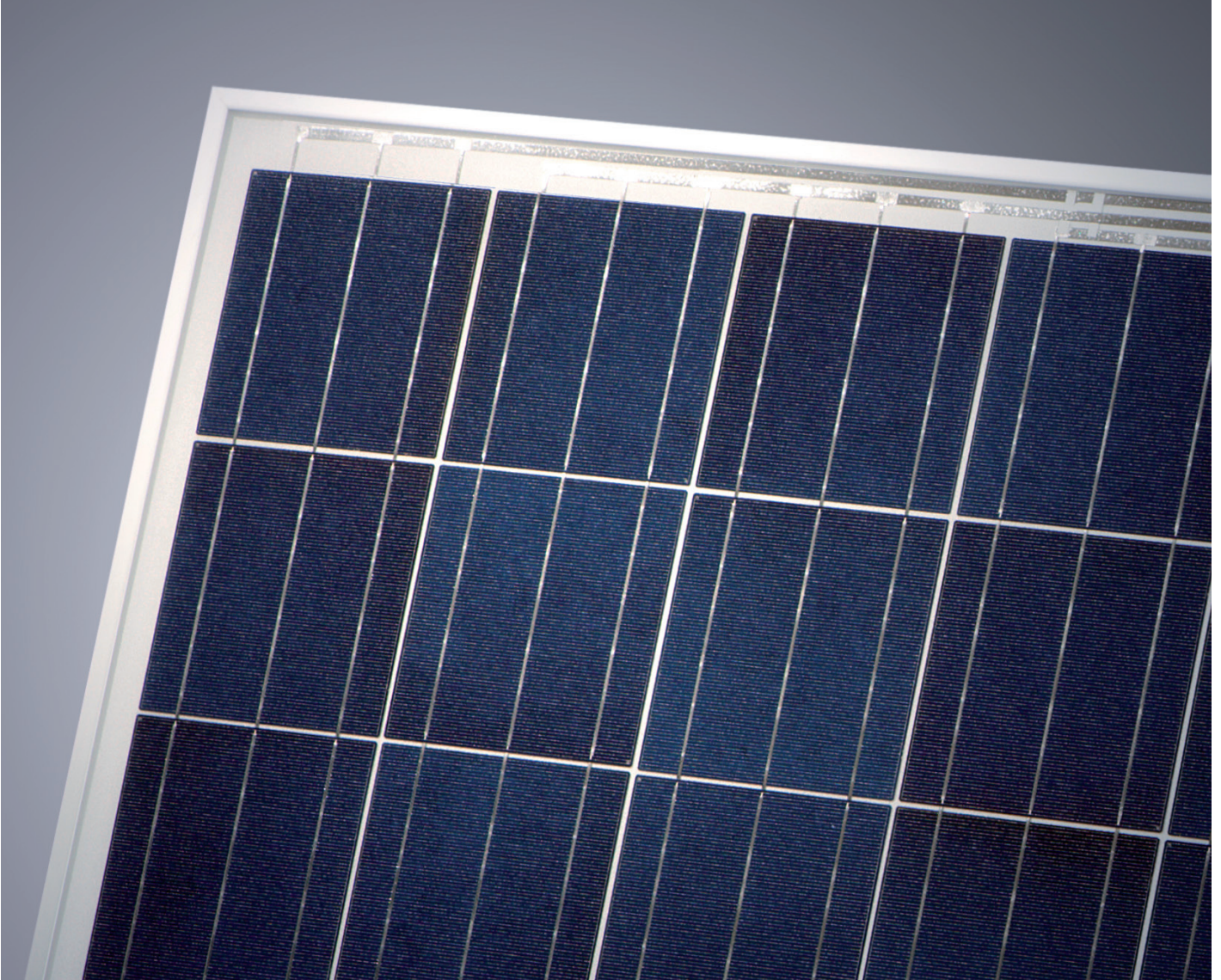


# Q-Cells solar module QC-C02

Power and Quality



- **HIGH-QUALITY COMPONENTS**
- **EXCELLENT LOW-LIGHT BEHAVIOR**
- **VARIOUS INSTALLATION OPTIONS**

MECHANICAL SPECIFICATION		TECHNICAL DRAWING
Format	1626 x 1024 x 50 mm (including frame)	
Weight	23 kg	
Front Cover	thermally pre-stressed solar glass	
Back Cover	Composite film	
Frame	aluminium	
Cell Type	Q6LTT3	
Cell Material	multi-crystalline silicon	
Number of Cells	10 x 6	
Junction Box	Protection class IP 65, with by-pass diode	
Cable Length	(+) 1.1m; (-) 1.1m	
Cable Type	solar cable 4mm <sup>2</sup>	
Connector	Multi-Contact MC4 (or equivalent)	

## ELECTRICAL CHARACTERISTICS

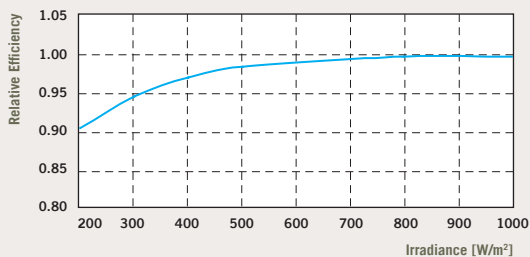
PERFORMANCE AT STANDARD TEST CONDITIONS (STC: 1000 W/m <sup>2</sup> , 25 °C, AM 1.5 SPECTRUM)										
POWER CLASS		195	200	205	210	215	220	225	230	235
Nominal Power (+/-2.5 W)	P <sub>max</sub> [W]	195	200	205	210	215	220	225	230	235
Short Circuit Current	I <sub>sc</sub> [A]	7.70	7.80	7.90	8.00	8.10	8.20	8.25	8.30	8.35
Open Circuit Voltage	V <sub>oc</sub> [V]	35.00	35.20	35.40	35.60	35.80	36.00	36.40	36.60	36.80
Current at Maximum Power	I <sub>mp</sub> [A]	7.10	7.20	7.30	7.40	7.50	7.60	7.65	7.75	7.80
Voltage at Maximum Power	V <sub>mp</sub> [V]	27.60	27.90	28.20	28.40	28.60	29.00	29.40	29.65	29.90

The power tolerance is +/- 3% referred to the measured performance.

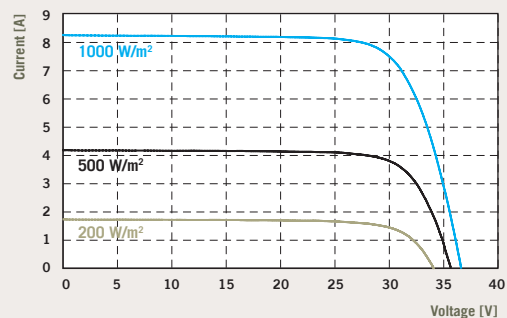
PERFORMANCE AT NORMAL OPERATING CELL TEMPERATURE (NOCT: 800 W/m <sup>2</sup> , 47± 3 °C, AM 1.5 SPECTRUM)										
POWER CLASS		195	200	205	210	215	220	225	230	235
Nominal Power (+/-2.5 W)	P <sub>max</sub> [W]	141	145	148	152	156	159	163	167	170
Short Circuit Current	I <sub>sc</sub> [A]	6.24	6.32	6.40	6.48	6.57	6.65	6.69	6.73	6.77
Open Circuit Voltage	V <sub>oc</sub> [V]	31.85	32.03	32.21	32.40	32.58	32.76	33.12	33.31	33.49
Current at Maximum Power	I <sub>mp</sub> [A]	5.62	5.71	5.79	5.89	5.98	6.04	6.09	6.17	6.26
Voltage at Maximum Power	V <sub>mp</sub> [V]	25.12	25.39	25.66	25.84	26.03	26.39	26.75	26.98	27.21

### PERFORMANCE AT LOW IRRADIANCE

The typical relative change in module efficiency at an irradiance of 200 W / m<sup>2</sup> in relation to 1000 W / m<sup>2</sup> (both at 25°C and AM 1.5 spectrum) is less than 6%.



### CHARACTERISTICS AT DIFFERENT TEMPERATURES AND IRRADIANCES



### TEMPERATURE COEFFICIENTS (AT 1000 W/m<sup>2</sup>, AM 1.5 SPECTRUM)

Temperature Coefficient of I <sub>sc</sub>	α	[%/K]	+0.06
Temperature Coefficient of V <sub>oc</sub>	β	[%/K]	-0.36
Temperature Coefficient of P <sub>max</sub>	γ	[%/K]	-0.43

## PROPERTIES FOR SYSTEM DESIGN

Safety Class	II		
Maximum System Voltage	V <sub>sys</sub>	[V]	1000
Maximum Reverse Current	I <sub>r</sub>	[A]	25
Wind/Snow Load		[Pa]	5400
Fire Rating	Class C		

## QUALIFICATIONS AND CERTIFICATES

CE-Compliant ; IEC 61215 pending; IEC 61730 pending



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