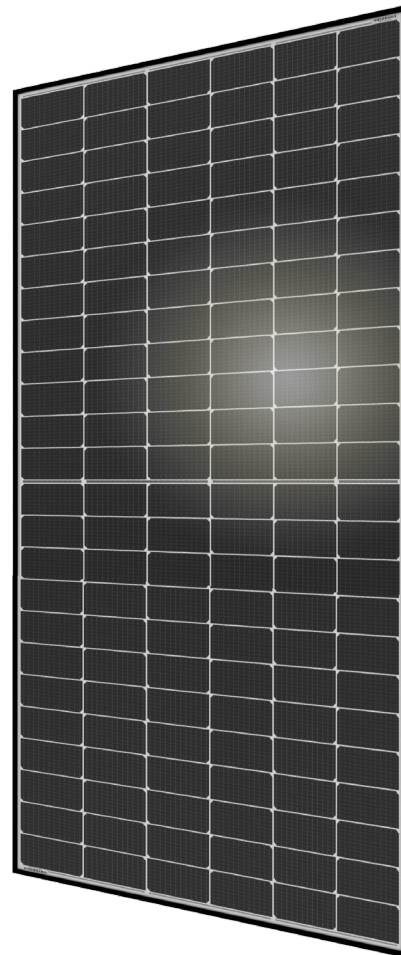


Características

- Low Electricity Generation Costs
Higher Yield per Surface Area, Lower BOS Costs, Higher Power Classes, and an Efficiency Rate of up to 19.9%.
- Innovative All-weather Technology
Optimal Yields, Whatever the Weather with Excellent Low-light and Temperature Behavior.
- Enduring High Performance
Long-term Yield Security with Anti Lid Technology, Anti Pid Technology, Hot-spot Protect and Traceable Quality Tra.Q™.
- Extreme Weather Rating
High-Tech Aluminum Alloy Frame, Certified for High Snow (5400 Pa) and Wind Loads (2400 Pa).
- A Reliable Investment
Inclusive 12-Year Product Warranty and 25-Year Linear Performance Warranty.





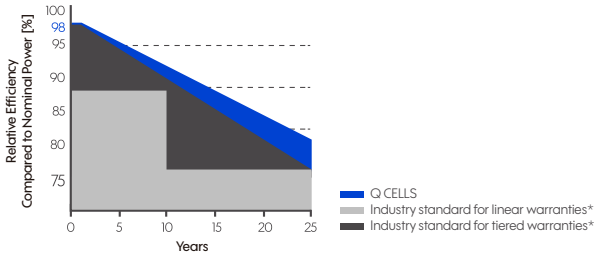
Applications

- Educational centres
- Industry
- Porcine farm
- Residence
- Restaurant
- Gimnasium



Solar Panel Q CELLS 390 W Datasheet

Q CELLS Performance Warranty

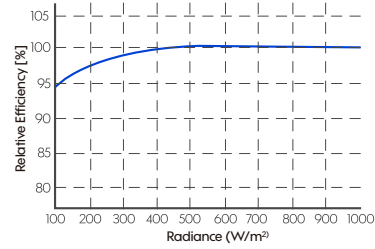


At least 98 % of nominal power during first year. Thereafter max. 0.54 % degradation per year. At least 93.1 % of nominal power up to 10 years. At least 85 % of nominal power up to 25 years.

All data within measurement tolerances. Full warranties in accordance with the warranty terms of the Q CELLS sales organization of your respective country

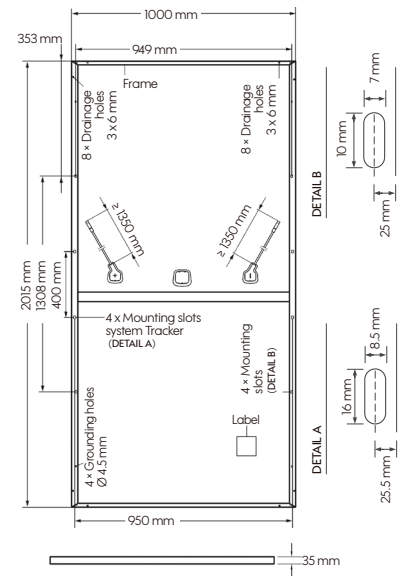
*Standard terms of guarantee for the 10 PV companies with the highest production capacity in 2014 (as at: September 2014)

Performance at Low Irradiance



Typical module performance under low irradiance conditions in comparison to STC conditions (25 °C, 1000 W/m²).

Dimensions



Packaging Information

Number of Modules per Pallet	29
Number of Pallets per 53' Trailer	24
Pallet Dimensions (L x W x H)	2080 x 1150 x 1185 mm
Pallet Weight	727 kg

Model

Panel solar 390 W

Mechanical

Format	2015 mm x 1000 mm x 35 mm, (including frame)
Weight	23 kg
Front Cover	3.2 mm thermally pre-stressed glass with anti-reflection technology
Back Cover	Composite film
Frame	Anodized aluminum
Cell	6 x 24 monocrystalline Q.ANTUM solar half-cells
Junction box	53 - 101 mm x 32 - 60 mm x 15 - 18 mm, Protection class IP67, with bypass diodes
Cable	4 mm ² Solar cable; (+) ≥ 1350 mm, (-) ≥ 1350 mm
Connector	Stäubli MC4, Hanwha Q CELLS HQC4, Amphenol UTX, Renhe 05-6, Tongling TL-C ble01S, JMTHY JM601; IP68 or Friends PV2e; IP67

Electrical

MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC¹ (POWER TOLERANCE +5 W / - 0 W)

Power at MPP ¹	P _{MPP}	[W]	390
Short Circuit Current ¹			10.10
Open Circuit Voltage ¹	V _{oc}	[V]	48.44
Current at MPP	I _{MPP}	[A]	9.61
Voltage at MPP	V _{MPP}	[V]	40.57
Efficiency ¹	η	[%]	≥ 19.4

MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT²

Power at MPP	P _{MPP}	[W]	292.1
Short Circuit Current			8.14
Open Circuit Voltage	V _{oc}	[V]	45.67
Current at MPP	I _{MPP}	[A]	7.57
Voltage at MPP	V _{MPP}	[V]	38.60

Temperature Coefficients

Temperature Coefficient of I _{sc}	α	[%/K]	+ 0.04
Temperature Coefficient of P _{MPP}	γ	[%/K]	- 0.35
Temperature Coefficient of V _{oc}	β	[%/K]	- 0.27
Normal Operating Module Temperature	NMOT	[%/K]	43 ± 3 °C

Propiedades para el diseño del sistema

Maximum System Voltage	V _{sys}	[V]	1000 (IEC) / 1000 (UL)
Maximum Series Fuse Rating		[A DC]	20
Max. Design Load, Push / Pull (UL)		[lbs/ft ²]	75 (3600 Pa) / 33 (1600 Pa)
Max. Test Load, Push / Pull (UL)		[lbs/ft ²]	113 (5400 Pa) / 50 (2400 Pa)
Safety Class			II
Fire Rating			C / TYPE 2
Permitted module temperature on continuous duty			-40 ~ +85 °C

Qualifications and Certificates

Certificates	UL 1703; CE-compliant; IEC 61215:2016, IEC 61730:2016 application class A
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¹Measurement tolerances P_{MPP} ± 3 %; I_{SC}; V_{OC} ± 5 % at STC: 1000 W/m², 25 ± 2 °C, AM 1.5 G according to IEC 60904-3 · ²800 W/m², NMOT, spectrum AM 1.5 G
The specifications are subject to changes and modifications without prior notice, due to our commitment of continuous improvement of reliability, design and functionality of our products