Q.ANTUM TECHNOLOGY: LOW LEVELIZED COST OF ELECTRICITY
Higher yield per surface area, lower BOS costs, higher power classes, and an efficiency rate of up to 19.8%.

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 and Anti PID Technology\(^1\), Hot-Spot Protect and Traceable Quality TraQ\(^\text{TM}\).

EXTREME WEATHER RATING
High-tech aluminum alloy frame, certified for high snow (5400 Pa) and wind loads (4000 Pa).

A RELIABLE INVESTMENT
Inclusive 25-year product warranty and 25-year linear performance warranty\(^2\).

STATE OF THE ART MODULE TECHNOLOGY
Q.ANTUM DUO combines cutting edge cell separation and innovative wiring with Q.ANTUM Technology.

\(^1\) APT test conditions according to IEC/TS 62804-1:2015, method B (-1500 V, 168 h)
\(^2\) See data sheet on rear for further information

THE IDEAL SOLUTION FOR:
Rooftop arrays on residential buildings

Engineered in Germany
MECHANICAL SPECIFICATION

Format 68.5 × 40.6 × 1.26 in (including frame) (1740 × 1030 × 32 mm)
Weight 43.9 lbs (19.9 kg)
Front Cover 0.13 in (3.2 mm) thermally pre-stressed glass with anti-reflection technology
Back Cover Composite film
Frame Black anodized aluminum
Cell 6 × 20 monocrystalline Q.ANTUM solar half cells
Junction Box 2.09-3.98 × 1.26-2.36 × 0.59-0.71 in (53-101 × 32-60 × 15-18 mm), Protection class IP67, with bypass diodes
Cable 4 mm² Solar cable; (+) ≥ 45.3 in (1150 mm), (−) ≥ 45.3 in (1150 mm)
Connector Stäubli MC4; IP68

ELECTRICAL CHARACTERISTICS

POWER CLASS 330 335 340 345 350
MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC
(Power tolerance +5 W / –0 W)
Power at MPP\(^1\) \(P_{\text{mpp}}\) [W] 330 335 340 345 350
Short Circuit Current\(^1\) \(I_{\text{sc}}\) [A] 10.41 10.47 10.52 10.58 10.63
Open Circuit Voltage\(^1\) \(V_{\text{oc}}\) [V] 40.15 40.41 40.66 40.92 41.17
Current at MPP \(I_{\text{mp}}\) [A] 9.91 9.97 10.02 10.07 10.13
Voltage at MPP \(V_{\text{mp}}\) [V] 33.29 33.62 33.94 34.25 34.56
Efficiency\(^1\) \(\eta\) [%] ≥ 18.4 ≥ 18.7 ≥ 19.0 ≥ 19.3 ≥ 19.5

MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT

Power at MPP \(P_{\text{nmot}}\) [W] 2470 250.7 254.5 258.2 262.0
Short Circuit Current \(I_{\text{sc}}\) [A] 8.39 8.43 8.48 8.52 8.57
Open Circuit Voltage \(V_{\text{oc}}\) [V] 37.86 38.10 38.34 38.59 38.83
Current at MPP \(I_{\text{mp}}\) [A] 7.60 7.64 7.69 7.89 7.97
Voltage at MPP \(V_{\text{mp}}\) [V] 31.66 31.97 32.27 33.27 33.57
Efficiency \(\eta\) [%] ≥ 18.4 ≥ 18.7 ≥ 19.0 ≥ 19.3 ≥ 19.5

Q CELLS PERFORMANCE WARRANTY

PERFORMANCE AT LOW IRRADIANCE

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

TEMPERATURE COEFFICIENTS

Temperature Coefficient of \(I_{\text{sc}}\) \(\alpha\) [% / K] +0.04 Temperature Coefficient of \(V_{\text{oc}}\) \(\beta\) [% / K] −0.27
Temperature Coefficient of \(P_{\text{mpp}}\) \(\gamma\) [% / K] −0.36 Nominal Module Operating Temperature NMOT [°F] 109 ± 5.4 (43 ± 3 °C)

PROPERTIES FOR SYSTEM DESIGN

Maximum System Voltage \(V_{\text{mvs}}\) [V] 1000 (IEC)/1000 (UL) PV module classification Class II
Maximum Series Fuse Rating [A / DC] 20 Fire Rating based on ANSI / UL 61730 TYPE 2
Max. Design Load, Push / Pull\(^2\) [lbs / ft²] 75 (3600 Pa)/55 (2667 Pa) Permitted Module Temperature on Continuous Duty –40 °F up to +185 °F
Max. Test Load, Push / Pull\(^2\) [lbs / ft²] 113 (5400 Pa)/84 (4000 Pa)

QUALIFICATIONS AND CERTIFICATES


PACKAGING INFORMATION

Horizontal packaging 70.1 in 42.5 in 47.6 in 1870 mm 1080 mm 1208 mm 1485 lbs 674 kg 28 pallets 26 pallets 32 modules
Vertical packaging 70.1 in 42.5 in 47.6 in 1200 mm 1150 mm 1208 mm 1805 lbs 883 kg 28 pallets 26 pallets 32 modules

Note: Installation instructions must be followed. See the installation and operating manual or contact our technical service department for further information on approved installation and use of this product. Q CELLS supplies solar modules in two different stacking methods, depending on the location of manufacture (modules are packed horizontally or vertically). You can find more detailed information in the document “Packaging and Transport Information”, available from Q CELLS.

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Specifications subject to technical changes. © Q CELLS 2023

*Standard terms of guarantee for the 10 PV companies

**See Installation Manual

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