The new high-performance module Q.PEAK-G4.1 is the ideal solution for residential buildings thanks to its innovative cell technology Q.ANTUM. The world-record cell design was developed to achieve the best performance under real conditions – even with low radiation intensity and on clear, hot summer days.

**Q.ANTUM TECHNOLOGY: LOW LEVELIZED COST OF ELECTRICITY**
Higher yield per surface area and lower BOS costs and higher power classes and an efficiency rate of up to 18.6%.

**INNOVATIVE ALL-WEATHER TECHNOLOGY**
Optimal yields, whatever the weather with excellent low-light and temperature behaviour.

**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 aluminium alloy frame, certified for high snow (5400 Pa) and wind loads (4000 Pa).

**MAXIMUM COST REDUCTIONS**
Up to 10% lower logistics costs due to higher module capacity per box.

**A RELIABLE INVESTMENT**
Inclusive 12-year product warranty and 25-year linear performance warranty.

**THE IDEAL SOLUTION FOR:**
Rooftop arrays on residential buildings

1 APT test conditions: Cells at -1500 V against grounded, with conductive metal foil covered module surface, 25°C, 168h
2 See data sheet on rear for further information.
MECHANICAL SPECIFICATION

Format 1670 mm × 1000 mm × 32 mm (including frame)

Weight 18.8 kg

Front Cover 3.2 mm thermally pre-stressed glass with anti-reflection technology

Back Cover Composite film

Frame Black anodised aluminium

Cell 6 × 10 monocrystalline Q.ANTUM solar cells

Junction box 66-77 mm × 15-19 mm Protection class IP67, with bypass diodes

Cable 4 mm² Solar cable; (+) 1000 mm, (-) 1000 mm

Connector Multi-Contact, MC4, IP65 and IP68

QUALIFICATIONS AND CERTIFICATES

Q CELLS PERFORMANCE WARRANTY

TEMPERATURE COEFFICIENTS

Temperature Coefficient of I SC  α (%/K) + 0.04

Temperature Coefficient of V OC  β (%/K) − 0.28

Normal Operating Cell Temperature NOCT [°C] 45

ELECTRICAL CHARACTERISTICS

POWER CLASS 290 295 300 305

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

Power at MPP 2 P MP [W] 290 295 300 305


Open Circuit Voltage* V OC [V] 39.19 39.48 39.76 40.05


Efficiency 2 η [%] ≥ 17.4 ≥ 17.7 ≥ 18.0 ≥ 18.3

MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NOC 3

Power at MPP 2 P MP [W] 214.6 218.3 222.0 225.7

Short Circuit Current* I SC [A] 7.77 7.82 7.88 7.94

Open Circuit Voltage* V OC [V] 36.65 36.92 37.19 37.46

Current at MPP* I MP [A] 7.12 7.20 7.27 7.35

Voltage at MPP* V MP [V] 30.14 30.33 30.52 30.70

1000 W/m², 25 °C, spectrum AM 1.5G 2 Measurement tolerances STC ± 3 %; NOC ± 5 % 3 800 W/m², NOCT, spectrum AM 1.5G * typical values, actual values may differ

PROPERTIES FOR SYSTEM DESIGN

Maximum System Voltage V MPP [V] 1000

Safety Class II

Maximum Reverse Current I MP [A] 20

Fire Rating C

Wind/Snow Load (Test-load in accordance with IEC 61215) 4000/5400

Permitted Module Temperature On Continuous Duty -40 °C up to +85 °C

QUALIFICATIONS AND CERTIFICATES

VDE Quality Tested, IEC 61215 (Ed. 2); IEC 61730 (Ed. 1), Application class A

This data sheet complies with DIN EN 50380.

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.

Hanwha Q CELLS GmbH
Sonnenallee 17-21, 06766 Bitterfeld-Wolfen, Germany | TEL +49 (0)3494 66 99-23444 | FAX +49 (0)3494 66 99-23000 | EMAIL sales@q-cells.com | WEB www.q-cells.com

Engineered in Germany