

**Q.BOOST** 

375-395

**ENDURING HIGH** 

PERFORMANCE

12









#### **BREAKING THE 20% EFFICIENCY BARRIER**

Q.ANTUM DUO Z Technology with zero gap cell layout boosts module efficiency up to 21.1%.



**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, 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).



# A RELIABLE INVESTMENT

Inclusive 18-year product warranty and 25-year linear performance warranty<sup>1</sup>.



## STATE OF THE ART MODULE TECHNOLOGY

Q.ANTUM DUO combines cutting edge cell separation and innovative wiring with Q.ANTUM Technology.

<sup>1</sup> See data sheet on rear for further information.

#### THE IDEAL SOLUTION FOR:



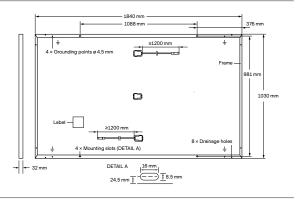


Rooftop arrays on commercial/industrial buildings



## **MECHANICAL SPECIFICATION**

| 19.5kg<br>2.8mm thermally pre-stressed glass with<br>anti-reflection technology |
|---|
| anti-reflection technology  |
| Composito film  |
| Composite film  |
| Black anodised aluminium  |
| 6 × 22 monocrystalline Q.ANTUM solar half cells                                 |
| 53-101 mm × 32-60 mm × 15-18 mm<br>Protection class IP67, with bypass diodes    |
| 4 mm² Solar cable; (+) ≥1200 mm, (-) ≥1200 mm                                   |
| Stäubli MC4; IP68   |
|   |

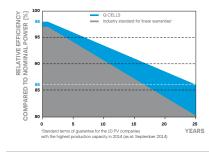


# **ELECTRICAL CHARACTERISTICS**

| POV     | VER CLASS                          |                  |                          | 375             | 380      | 385   | 390   | 395   |
|---------|------------------------------------|------------------|--------------------------|-----------------|----------|-------|-------|-------|
| MIN     | IMUM PERFORMANCE AT STANDA         | RD TEST CONDITIC | NS, STC <sup>1</sup> (PC | WER TOLERANCE   | +5W/-0W) |       |       |       |
| Minimum | Power at MPP <sup>1</sup>          | P <sub>MPP</sub> | [W]                      | 375             | 380      | 385   | 390   | 395   |
|         | Short Circuit Current <sup>1</sup> | I <sub>sc</sub>  | [A]                      | 10.62           | 10.65    | 10.68 | 10.71 | 10.74 |
|         | Open Circuit Voltage <sup>1</sup>  | V <sub>oc</sub>  | [V]                      | 44.96           | 44.99    | 45.03 | 45.06 | 45.10 |
|         | Current at MPP                     | IMPP             | [A]                      | 10.09           | 10.14    | 10.20 | 10.26 | 10.32 |
|         | Voltage at MPP                     | V <sub>MPP</sub> | [V]                      | 37.18           | 37.46    | 37.74 | 38.01 | 38.29 |
|         | Efficiency <sup>1</sup>            | η                | [%]                      | ≥19.8           | ≥20.1    | ≥20.3 | ≥20.6 | ≥20.8 |
| MIN     | IIMUM PERFORMANCE AT NORMAL        | OPERATING CONI   | DITIONS, NM              | OT <sup>2</sup> |          |       |       |       |
|         | Power at MPP                       | P <sub>MPP</sub> | [W]                      | 280.8           | 284.6    | 288.3 | 292.0 | 295.8 |
| Minimum | Short Circuit Current              | Isc              | [A]                      | 8.55            | 8.58     | 8.60  | 8.63  | 8.65  |
|         | Open Circuit Voltage               | V <sub>oc</sub>  | [V]                      | 42.39           | 42.43    | 42.46 | 42.50 | 42.53 |
|         | Current at MPP                     | IMPP             | [A]                      | 7.93            | 7.99     | 8.04  | 8.09  | 8.14  |
|         | Voltage at MPP                     | V <sub>MPP</sub> | [V]                      | 35.39           | 35.64    | 35.87 | 36.11 | 36.34 |
|         | Voltage at MPP                     | V <sub>MPP</sub> | [V]                      | 35.39           | 35.64    | 35.8/ | 36.11 |       |

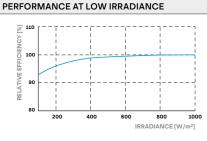
<sup>1</sup>Measurement tolerances P<sub>MPP</sub>±3%; I<sub>SC</sub>; V<sub>oc</sub>±5% at STC: 1000 W/m<sup>2</sup>, 25±2°C, AM 1.5 according to IEC 60904-3 • <sup>2</sup>800 W/m<sup>2</sup>, NMOT, spectrum AM 1.5

## Q CELLS PERFORMANCE WARRANTY



At least 98% of nominal power during first year. Thereafter max. 0.5% degradation per year. At least 93.5% of nominal power up to 10 years. At least 86% 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 organisation of your respective country.



Typical module performance under low irradiance conditions in comparison to STC conditions (25 °C, 1000 W/m<sup>2</sup>).

**PACKAGING INFORMATION** 

#### **TEMPERATURE COEFFICIENTS**

| Temperature Coefficient of I <sub>sc</sub>  | α | [%/K] | +0.04 | Temperature Coefficient of V <sub>oc</sub> | β    | [%/K] | -0.27 |
|---|---|-------|-------|--|------|-------|-------|
| Temperature Coefficient of P <sub>MPP</sub> | Ŷ | [%/K] | -0.35 | Nominal Module Operating Temperature       | NMOT | [°C]  | 43±3  |

## **PROPERTIES FOR SYSTEM DESIGN**

| Maximum System Voltage        | V <sub>sys</sub> | [V]  | 1000      | PV module classification           | Class II      |
|-------------------------------|------------------|------|-----------|------------------------------------|---------------|
| Maximum Reverse Current       | I <sub>R</sub>   | [A]  | 20        | Fire Rating based on ANSI/UL 61730 | C/TYPE 2      |
| Max. Design Load, Push / Pull |                  | [Pa] | 3600/2660 | Permitted Module Temperature       | -40°C - +85°C |
| Max. Test Load, Push / Pull   |                  | [Pa] | 5400/4000 | on Continuous Duty                 |               |

## **QUALIFICATIONS AND CERTIFICATES**

#### J کر <mark>الاہ</mark> 今 24t 40'HC F Vertical 1950mm 1150mm 1185mm 682.5kg 28 pallets 24 pallets 33 modules CERTIFIED packaging Hanwha Q CELLS Australia Pty Ltd www.tuv.com ID 111122553

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.

#### Made in Malaysia

IEC 61215:2016:

IEC 61730:2016. This data sheet complies

with DIN EN 50380.

Certification holder

#### Hanwha Q CELLS Australia Pty Ltd

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