



Inclusive 12-year product warranty and 25-year linear performance warranty<sup>2</sup>.



# STATE OF THE ART MODULE TECHNOLOGY

Q.ANTUM DUO combines cutting edge cell separation and innovative 12-busbar design with Q.ANTUM Technology.

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

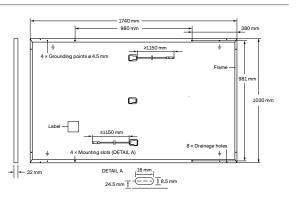
# THE IDEAL SOLUTION FOR:



Rooftop arrays on residential buildings







#### **ELECTRICAL CHARACTERISTICS**

PO	VER CLASS			345	350	355	360
MIN	IIMUM PERFORMANCE AT STANDA	RD TEST CONDITIO	NS, STC1 (PC	WER TOLERANCE +5 W /	-0 W)		
	Power at MPP¹	P <sub>MPP</sub>	[W]	345	350	355	360
_	Short Circuit Current <sup>1</sup>	I <sub>sc</sub>	[A]	10.68	10.74	10.79	10.84
ın I	Open Circuit Voltage <sup>1</sup>	V <sub>oc</sub>	[V]	40.45	40.70	40.95	41.19
Minimu	Current at MPP	I <sub>MPP</sub>	[A]	10.17	10.22	10.28	10.33
_	Voltage at MPP	$V_{MPP}$	[V]	33.92	34.24	34.55	34.85
	Efficiency <sup>1</sup>	η	[%]	≥19.3	≥19.5	≥19.8	≥20.1
MIN	IIMUM PERFORMANCE AT NORMAL	OPERATING CONE	DITIONS, NM	OT <sup>2</sup>			
	Power at MPP	P <sub>MPP</sub>	[W]	258.4	262.1	265.9	269.6
E	Short Circuit Current	I <sub>sc</sub>	[A]	8.61	8.65	8.69	8.74
nim	Open Circuit Voltage	V <sub>oc</sub>	[V]	38.14	38.38	38.61	38.85
≘	Current at MPP	I <sub>MPP</sub>	[A]	8.00	8.05	8.09	8.13
	Voltage at MPP	V <sub>MPP</sub>	[V]	32.28	32.57	32.87	33.16

 $^1\text{Measurement tolerances P}_{\text{MPP}}\pm3\%; I_{\text{SC}}; V_{\text{OC}}\pm5\% \text{ at STC}; \overline{1000\text{W/m}^2, 25\pm2\text{°C}, \text{AM 1.5 according to IEC 60904-3}} + 2800\text{W/m}^2, \text{NMOT, spectrum AM 1.5}$ 

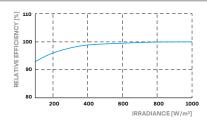
#### Q CELLS PERFORMANCE WARRANTY

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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 organisation of your respective country.

#### 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 <sub>SC</sub>	α	[%/K]	+0.04	Temperature Coefficient of Voc	β	[%/K]	-0.27
Temperature Coefficient of P <sub>MPP</sub>	γ	[%/K]	-0.35	Nominal Module Operating Temperature	NMOT	[°C]	43±3

## PROPERTIES FOR SYSTEM DESIGN

Maximum System Voltage	$V_{\text{SYS}}$	[V]	1000 (IEC)/1000 (UL)	PV module classification	Class II
Maximum Reverse Current	$I_R$	[A]	20	Fire Rating based on ANSI/UL 1703	C/TYPE 2
Max. Design Load, Push/Pull		[Pa]	3600/2667	·	-40°C - +85°C
Max. Test Load, Push / Pull		[Pa]	5400/4000	on Continuous Duty	

## **QUALIFICATIONS AND CERTIFICATES**

# PACKAGING INFORMATION

VDE Quality Tested, IEC 61215:2016; IEC 61730:2016; This data sheet complies with DIN EN 50380.







Number of Modules per Pallet	32		
Number of Pallets per Trailer (24t)	28		
Number of Pallets per 40' HC-Container (26t)	26		
Pallet Dimensions (L × W × H)	1791 × 1130 × 1200 mm		
Pallet Weight	681kg		

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

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