

# THE IDEAL SOLUTION FOR:

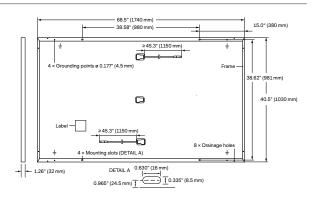


Rooftop arrays on residential buildings



Rooftop arrays on commercial/industrial buildings



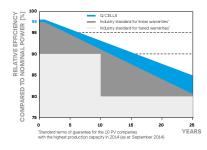


### **ELECTRICAL CHARACTERISTICS**

IUM PERFORMANCE AT STANDARD TEST O	CONDITIO	NS, STC1 (POWE	D TOLEDANIOE : EVALL			
Power at MPP¹			ER TOLERANCE +5 W / -C	W)		
	$P_{MPP}$	[W]	340	345	350	355
Short Circuit Current <sup>1</sup>	I <sub>sc</sub>	[A]	10.68	10.73	10.79	10.84
Open Circuit Voltage <sup>1</sup>	Voc	[V]	40.24	40.49	40.73	40.98
Current at MPP	I <sub>MPP</sub>	[A]	10.16	10.22	10.27	10.33
/oltage at MPP	V <sub>MPP</sub>	[V]	33.45	33.76	34.07	34.38
Efficiency <sup>1</sup>	η	[%]	≥19.0	≥19.3	≥19.5	≥19.8
IUM PERFORMANCE AT NORMAL OPERAT	NG CONE	DITIONS, NMOT	2			
Power at MPP	P <sub>MPP</sub>	[W]	254.5	258.2	261.9	265.7
Short Circuit Current	I <sub>sc</sub>	[A]	8.60	8.65	8.69	8.74
Open Circuit Voltage	Voc	[V]	37.94	38.17	38.41	38.65
Current at MPP	I <sub>MPP</sub>	[A]	8.00	8.04	8.09	8.13
/oltage at MPP	V <sub>MPP</sub>	[V]	31.81	32.10	32.40	32.69
	Open Circuit Voltage¹ Current at MPP  Voltage at MPP  Efficiency¹  UM PERFORMANCE AT NORMAL OPERATI  Ower at MPP  Ehort Circuit Current  Open Circuit Voltage  Current at MPP	Open Circuit Voltage¹         Voc           Current at MPP         I <sub>MPP</sub> Voltage at MPP         V <sub>MPP</sub> Efficiency¹         ¶           UM PERFORMANCE AT NORMAL OPERATING CONDITIONS         P <sub>MPP</sub> Short Circuit Current         I <sub>SC</sub> Open Circuit Voltage         V <sub>OC</sub> Current at MPP         I <sub>MPP</sub>	Open Circuit Voltage¹         Voc         [V]           Current at MPP         I <sub>MPP</sub> [A]           Voltage at MPP         V <sub>MPP</sub> [V]           Vfficiency¹         n         [%]           UM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOTOWER at MPP         P <sub>MPP</sub> [W]           Vower at MPP         P <sub>MPP</sub> [W]           Short Circuit Current         I <sub>SC</sub> [A]           Open Circuit Voltage         V <sub>OC</sub> [V]           Current at MPP         I <sub>MPP</sub> [A]	Open Circuit Voltage¹         V <sub>OC</sub> [V]         40.24           Current at MPP         I <sub>MPP</sub> [A]         10.16           Voltage at MPP         V <sub>MPP</sub> [V]         33.45           Efficiency¹         η         [%]         ≥19.0           UM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT²         Vower at MPP         [W]         254.5           Short Circuit Current         I <sub>SC</sub> [A]         8.60           Open Circuit Voltage         V <sub>OC</sub> [V]         37.94           Current at MPP         I <sub>MPP</sub> [A]         8.00	Open Circuit Voltage¹         V <sub>OC</sub> [V]         40.24         40.49           Current at MPP         I <sub>MPP</sub> [A]         10.16         10.22           Voltage at MPP         V <sub>MPP</sub> [V]         33.45         33.76           difficiency¹         η         [%]         ≥19.0         ≥19.3           UM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT²         Vower at MPP         [W]         254.5         258.2           chort Circuit Current         I <sub>SC</sub> [A]         8.60         8.65           Open Circuit Voltage         V <sub>OC</sub> [V]         37.94         38.17           current at MPP         I <sub>MPP</sub> [A]         8.00         8.04	Open Circuit Voltage¹         V <sub>oc</sub> [V]         40.24         40.49         40.73           Current at MPP         I <sub>MPP</sub> [A]         10.16         10.22         10.27           Voltage at MPP         V <sub>MPP</sub> [V]         33.45         33.76         34.07           Efficiency¹         η         [%]         ≥19.0         ≥19.3         ≥19.5           UM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT²         Vower at MPP         P <sub>MPP</sub> [W]         254.5         258.2         261.9           Short Circuit Current         I <sub>SC</sub> [A]         8.60         8.65         8.69           Open Circuit Voltage         V <sub>OC</sub> [V]         37.94         38.17         38.41           Current at MPP         I <sub>MPP</sub> [A]         8.00         8.04         8.09

 $^{1}\text{Measurement tolerances P}_{\text{MPP}}\pm3\%; |_{\text{SC}}; V_{\text{OC}}\pm5\% \text{ at STC}; 1000 \text{W/m}^{2}, 25\pm2\text{°C}, \text{AM 1.5 according to IEC 60904-3} \bullet ^{2}800 \text{W/m}^{2}, \text{NMOT, spectrum AM 1.5 according to IEC 60904-3} \bullet ^{2}800 \text{W/m}^{2}, \text{NMOT, spectrum AM 1.5 according to IEC 60904-3} \bullet ^{2}800 \text{W/m}^{2}, \text{NMOT, spectrum AM 1.5 according to IEC 60904-3} \bullet ^{2}800 \text{W/m}^{2}, \text{NMOT, spectrum AM 1.5 according to IEC 60904-3} \bullet ^{2}800 \text{W/m}^{2}, \text{NMOT, spectrum AM 1.5 according to IEC 60904-3} \bullet ^{2}800 \text{W/m}^{2}, \text{NMOT, spectrum AM 1.5 according to IEC 60904-3} \bullet ^{2}800 \text{W/m}^{2}, \text{NMOT, spectrum AM 1.5 according to IEC 60904-3} \bullet ^{2}800 \text{W/m}^{2}, \text{NMOT, spectrum AM 1.5 according to IEC 60904-3} \bullet ^{2}800 \text{W/m}^{2}, \text{NMOT, spectrum AM 1.5 according to IEC 60904-3} \bullet ^{2}800 \text{W/m}^{2}, \text{NMOT, spectrum AM 1.5 according to IEC 60904-3} \bullet ^{2}800 \text{W/m}^{2}, \text{NMOT, spectrum AM 1.5 according to IEC 60904-3} \bullet ^{2}800 \text{W/m}^{2}, \text{NMOT, spectrum AM 1.5 according to IEC 60904-3} \bullet ^{2}800 \text{W/m}^{2}, \text{NMOT, spectrum AM 1.5 according to IEC 60904-3} \bullet ^{2}800 \text{W/m}^{2}, \text{NMOT, spectrum AM 1.5 according to IEC 60904-3} \bullet ^{2}800 \text{W/m}^{2}, \text{NMOT, spectrum AM 1.5 according to IEC 60904-3} \bullet ^{2}800 \text{W/m}^{2}, \text{NMOT, spectrum AM 1.5 according to IEC 60904-3} \bullet ^{2}800 \text{W/m}^{2}, \text{NMOT, spectrum AM 1.5 according to IEC 60904-3} \bullet ^{2}800 \text{W/m}^{2}, \text{NMOT, spectrum AM 1.5 according to IEC 60904-3} \bullet ^{2}800 \text{W/m}^{2}, \text{NMOT, spectrum AM 1.5 according to IEC 60904-3} \bullet ^{2}800 \text{W/m}^{2}, \text{NMOT, spectrum AM 1.5 according to IEC 60904-3} \bullet ^{2}800 \text{W/m}^{2}, \text{NMOT, spectrum AM 1.5 according to IEC 60904-3} \bullet ^{2}800 \text{W/m}^{2}, \text{NMOT, spectrum AM 1.5 according to IEC 60904-3} \bullet ^{2}800 \text{W/m}^{2}, \text{NMOT, spectrum AM 1.5 according to IEC 60904-3} \bullet ^{2}800 \text{W/m}^{2}, \text{NMOT, spectrum AM 1.5 according to IEC 60904-3} \bullet ^{2}800 \text{W/m}^{2}, \text{NMOT, spectrum AM 1.5 according to IEC 60904-3} \bullet ^{2}8000 \text{W/m}^{2}, \text{NMOT, spectrum AM 1.5 according to IEC 60904-3} \bullet ^{2}8000 \text{W/m}^{2}, \text{NM$ 

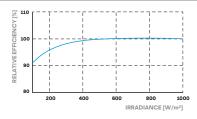
### Q CELLS PERFORMANCE WARRANTY



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.

# 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]	-0.36	Normal Module Operating Temperature	NMOT	[°F]	109±5.4 (43±3°C)

### PROPERTIES FOR SYSTEM DESIGN

Maximum System Voltage V <sub>SYS</sub>	[V]	1000 (IEC)/1000 (UL)	Safety Class	II	
Maximum Series Fuse Rating	[A DC]	20	Fire Rating based on ANSI / UL 1703	C (IEC)/TYPE 2 (UL)	
Max. Design Load, Push / Pull <sup>3</sup>	[lbs/ft <sup>2</sup> ]	75 (3600 Pa) / 55 (2667 Pa)	Permitted Module Temperature	-40°F up to +185°F	
Max. Test Load, Push / Pull <sup>3</sup>	[lbs/ft <sup>2</sup> ]	113 (5400 Pa) / 84 (4000 Pa)	on Continuous Duty	(-40°C up to +85°C)	

# QUALIFICATIONS AND CERTIFICATES

## **PACKAGING INFORMATION**

UL 1703, VDE Quality Tested, CE-compliant, IEC 61215:2016, IEC 61730:2016, Application Class II, U.S. Patent No. 9,893,215 (solar cells)



<sup>3</sup> See Installation Manual





Number of Modules per Pallet	32
Number of Pallets per 53' Trailer	28
Number of Pallets per 40' HC-Container	24
Pallet Dimensions (L×W×H)	$71.5 \times 45.3 \times 48.0$ in $(1815 \times 1150 \times 1220$ mm)
Pallet Weight	1505 lbs (683 kg)

**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.

# Specifications subject to technical changes © **Q CELLS** Q.PEAK DUO-G6+\_340-355\_2019-06\_Rev01\_