

THE IDEAL SOLUTION FOR:

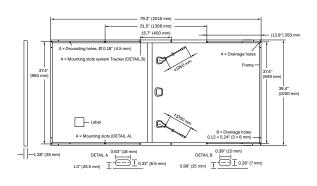


Rooftop arrays on commercial/industrial buildings



Ground-mounted solar power plants



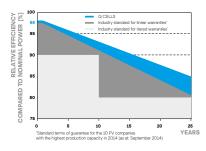


ELECTRICAL CHARACTERISTICS

WER CLASS			385	390	395	400	405
IIMUM PERFORMANCE AT STANDAR	D TEST CONDITIO	NS, STC1 (PO	WER TOLERANCE +	5W/-0W)			
Power at MPP¹	P _{MPP}	[W]	385	390	395	400	405
Short Circuit Current ¹	I _{sc}	[A]	10.05	10.10	10.14	10.19	10.23
Open Circuit Voltage ¹	V _{oc}	[V]	48.17	48.44	48.70	48.96	49.22
Current at MPP	I _{MPP}	[A]	9.57	9.61	9.66	9.70	9.75
Voltage at MPP	V_{MPP}	[V]	40.24	40.57	40.90	41.23	41.56
Efficiency ¹	η	[%]	≥19.1	≥19.4	≥19.6	≥19.9	≥20.1
IIMUM PERFORMANCE AT NORMAL	OPERATING COND	DITIONS, NM	OT ²				
Power at MPP	P _{MPP}	[W]	288.3	292.1	295.8	299.6	303.3
Short Circuit Current	I _{sc}	[A]	8.10	8.14	8.17	8.21	8.24
Open Circuit Voltage	V _{oc}	[V]	45.42	45.67	45.92	46.17	46.41
Current at MPP	I _{MPP}	[A]	7.53	7.57	7.60	7.64	7.67
Voltage at MPP	V _{MPP}	[V]	38.29	38.60	38.92	39.23	39.54
	Power at MPP¹ Short Circuit Current¹ Open Circuit Voltage¹ Current at MPP Voltage at MPP Efficiency¹ NIMUM PERFORMANCE AT NORMAL Power at MPP Short Circuit Current Open Circuit Voltage Current at MPP	NIMUM PERFORMANCE AT STANDARD TEST CONDITIO Power at MPP¹ P _{MPP} Short Circuit Current¹ I _{SC} Open Circuit Voltage¹ V _{OC} Current at MPP I _{MPP} Voltage at MPP V _{MPP} Efficiency¹ ¶ NIMUM PERFORMANCE AT NORMAL OPERATING CONDITION Power at MPP P _{MPP} Short Circuit Current I _{SC} Open Circuit Voltage V _{OC} Current at MPP I _{MPP}	Power at MPP¹ PMPP [W] Short Circuit Current¹ Isc [A] Current at MPP IMPP [W] Efficiency¹ Impe [A] NIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMO Power at MPP PMPP [W] Short Circuit Voltage Impe PMPP PMPP [W] Short Circuit Current Isc [A] Current at MPP PMPP [W] Short Circuit Current Isc [A] Current at MPP PMPP [W] Current at MPP Isc [A]	NIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC¹ (POWER TOLERANCE + Power at MPP¹ P _{MPP} [W] 385 Short Circuit Current¹ I_{SC} [A] 10.05 Open Circuit Voltage¹ V_{OC} [V] 48.17 Current at MPP I_{MPP} [A] 9.57 Voltage at MPP V_{MPP} [V] 40.24 Efficiency¹ η [%] ≥19.1 NIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT² Power at MPP P_{MPP} [W] 288.3 Short Circuit Current I_{SC} [A] 8.10 Open Circuit Voltage V_{OC} [V] 45.42 Current at MPP I_{MPP} [A] 7.53	NIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC1 (POWER TOLERANCE +5 W / -0 W) Power at MPP1 P _{MPP} [W] 385 390 Short Circuit Current1 I _{SC} [A] 10.05 10.10 Open Circuit Voltage1 V _{OC} [V] 48.17 48.44 Current at MPP I _{MPP} [A] 9.57 9.61 Voltage at MPP V _{MPP} [V] 40.24 40.57 Efficiency1 η [%] \geq 19.1 \geq 19.4 NIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT2 Power at MPP P _{MPP} [W] 288.3 292.1 Short Circuit Current I _{SC} [A] 8.10 8.14 Open Circuit Voltage V _{OC} [V] 45.42 45.67 Current at MPP I _{MPP} [A] 7.53 7.57	NIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC¹ (POWER TOLERANCE +5 W / -0 W) Power at MPP¹ P _{MPP} [W] 385 390 395 Short Circuit Current¹ I _{SC} [A] 10.05 10.10 10.14 Open Circuit Voltage¹ V _{OC} [V] 48.17 48.44 48.70 Current at MPP I _{MPP} [A] 9.57 9.61 9.66 Voltage at MPP V _{MPP} [V] 40.24 40.57 40.90 Efficiency¹ η [%] \geq 19.1 \geq 19.4 \geq 19.6 NIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT² Power at MPP P _{MPP} [W] 288.3 292.1 295.8 Short Circuit Current I _{SC} [A] 8.10 8.14 8.17 Open Circuit Voltage V _{OC} [V] 45.42 45.67 45.92 Current at MPP I _{MPP} [A] 7.53 7.57 7.60	NIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC¹ (POWER TOLERANCE +5 W/-0 W) Power at MPP¹ P _{MPP} [W] 385 390 395 400 Short Circuit Current¹ I _{SC} [A] 10.05 10.10 10.14 10.19 Open Circuit Voltage¹ V _{OC} [V] 48.17 48.44 48.70 48.96 Current at MPP I _{MPP} [A] 9.57 9.61 9.66 9.70 Voltage at MPP V _{MPP} [V] 40.24 40.57 40.90 41.23 Efficiency¹ η [%] \geq 19.1 \geq 19.4 \geq 19.6 \geq 19.9 NIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT² Power at MPP P _{MPP} [W] 288.3 292.1 295.8 299.6 Short Circuit Current I _{SC} [A] 8.10 8.14 8.17 8.21 Open Circuit Voltage V _{OC} [V] 45.42 45.67 45.92 46.17 Current at MPP I _{MPP} [A] 7.53 7.57 7.60 7.64

¹Measurement tolerances P_{MPP} ±3%; I_{SC}; V_{OC} ±5% at STC: 1000 W/m², 25±2°C, AM 1.5 according to IEC 60904-3 • ²800 W/m², NMOT, spectrum AM 1.5

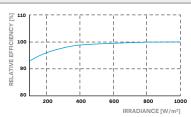
Q CELLS PERFORMANCE WARRANTY



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 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 _{SC}	α	[%/K]	+0.04	Temperature Coefficient of Voc	β	[%/K]	-0.27
Temperature Coefficient of P _{MPP}	γ	[%/K]	-0.35	Nominal Module Operating Temperature	NMOT	[°F]	109±5.4 (43±3°C)

PROPERTIES FOR SYSTEM DESIGN

Maximum System Voltage V _{SYS}	[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 ³	[lbs/ft ²]	75 (3600 Pa) / 33 (1600 Pa)	Permitted Module Temperature on Continuous Duty	-40°F up to +185°F
Max. Test Load, Push / Pull ³	[lbs/ft ²]	113 (5400 Pa)/50 (2400 Pa)		(-40°C up to +85°C)

QUALIFICATIONS AND CERTIFICATES

PACKAGING INFORMATION

47.1 in

46.1 in

1196 mm

1170 mm

UL 61730, CE-compliant IEC 61215:2016, IEC 61730:2016, U.S. Patent No. 9,893,215 (solar cells)

3 See Installation Manual









81.1in	40.9 in

1040 mm

1150 mm

45.3 in

84.6 in

2060mm

2090 mm





1588 lbs

1635lbs

721 ka

742 kg



24

27

pallets

pallets



22

22

pallets

pallets



modules

modules

29

29

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.

Horizontal

packaging

packaging

Vertical

Hanwha Q CELLS America Inc.