



# Certificate of Compliance

**Certificate:** 2462554 **Master Contract:** 254141 (254141)  
**Project:** 70138430 **Date Issued:** 2017-05-23  
**Issued to:** Hanwha Q.CELLS GmbH  
 17-21 Sonnenallee  
 Bitterfeld-Wolfen, Sachsen-Anhalt 06766  
 GERMANY  
 Attention: Wiebke Engler

*The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US or with adjacent indicator 'US' for US only or without either indicator for Canada only.*



**Issued by:** *Chao (Chris) Wang*  
 Chao (Chris) Wang

## PRODUCTS

CLASS - C531110 - POWER SUPPLIES-Photovoltaic Modules and Panels  
 CLASS - C531190 - POWER SUPPLIES-Photovoltaic Modules and Panels - Certified to US Standards

Photovoltaic Modules with maximum system voltage up to 1500 V dc, and Class C fire class rating and Module Fire Performance: Type 1, @ Standard Test Condition (STC):

Module type	Power Range (W)	Pmax	Voc	Isc	Vmp	Imp
Q.BASE-GY XXX	245-295	245	37.08	8.90	29.58	8.28
Q.PRO-GY XXX		250	37.31	8.98	29.88	8.37
Q.PRO BFR-GY XXX		255	37.54	9.07	30.18	8.45
Q.PRO -GY/SC XXX		260	37.77	9.15	30.45	8.53
MODULE GY XXX		265	38.01	9.23	30.75	8.62
MODULE BFR-GY XXX		270	38.24	9.31	31.02	8.70
B.LINE PRO-GY XXX		275	37.47	9.39	31.30	8.79
B.LINE PRO BFR-GY XXX		280	38.70	9.48	31.56	8.87
B.LINE PRO-GY/SC XXX		285	38.93	9.56	31.83	8.95
		290	39.17	9.64	32.08	9.04
	295	39.70	9.72	32.34	9.12	



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Q.PLUS-GY XXX B.LINE PLUS-GY XXX	245-295	245	37.36	9.13	28.88	8.48
		250	37.62	9.19	29.22	8.55
		255	37.88	9.25	29.56	8.63
		260	38.13	9.31	29.89	8.70
		265	38.39	9.37	30.21	8.77
		270	38.65	9.43	30.53	8.84
		275	38.90	9.49	30.85	8.91
		280	39.16	9.55	31.16	8.99
		285	39.42	9.61	31.46	9.06
		290	39.67	9.67	31.76	9.13
		295	39.93	9.73	32.06	9.20
Q.PLUS BFR-GY.Y XXX B.LINE PLUS BFR-GY.Y XXX Q.PLUS BFR-GY.Y/TAA XXX B.LINE PLUS BFR-GY.Y/TAA XXX Q.PLUS-GY.Y/SC XXX B.LINE PLUS-GY.Y/SC Q.PLUS-GY.Y XXX B.LINE PLUS-GY.Y XXX	245-295	245	37.20	9.00	29.35	8.35
		250	37.45	9.06	29.70	8.42
		255	37.70	9.11	30.04	8.49
		260	37.96	9.17	30.38	8.56
		265	38.21	9.23	30.71	8.63
		270	38.46	9.29	31.04	8.70
		275	38.72	9.35	31.36	8.77
		280	38.97	9.41	31.67	8.84
		285	39.22	9.46	31.99	8.91
		290	39.48	9.52	32.29	8.98
		295	39.73	9.58	32.59	9.05
Q.PRO-GY.Y XXX Q.PRO BFR-GY.Y XXX Q.PRO-GY.Y/SC XXX B.LINE PRO-GY.Y XXX B.LINE PRO FR-GY.Y B.LINE PRO-GY.Y/SC XXX	245-295	245	37.08	8.90	29.58	8.28
		250	37.31	8.98	29.88	8.37
		255	37.54	9.07	30.18	8.45
		260	37.77	9.15	30.46	8.53
		265	38.01	9.23	30.75	8.62
		270	38.24	9.31	31.02	8.70
		275	38.47	9.39	31.30	8.79
		280	38.70	9.48	31.56	8.87
		285	38.93	9.56	31.83	8.95
		290	39.17	9.64	32.08	9.04
		295	39.40	9.72	32.34	9.12
Q.PRO BLK-GY XXX MODULE BLK-GY XXX	245-295	245	37.59	8.52	30.86	8.02
		250	37.94	8.71	30.87	8.18
		255	38.28	8.89	30.88	8.34
		260	38.63	9.08	30.89	8.50
		265	38.98	9.27	30.90	8.66
		270	39.33	9.46	30.91	8.82
		275	39.68	9.64	30.92	8.97
		280	40.30	9.83	30.93	9.13
		290	40.73	10.21	30.95	9.45



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		295	41.08	10.40	30.96	9.61
Q.PEAK-GY.Y XXX	270-325	270	38.05	9.35	31.02	8.70
B.LINE PEAK-GY.Y XXX		275	38.33	9.42	31.26	8.80
Q.PEAK BLK-GY.Y XXX		280	38.62	9.49	31.50	8.89
B.LINE PEAK BLK-GY.Y XXX		285	38.91	9.56	31.73	8.98
Q.PEAK-GY.Y/SC XXX		290	39.19	9.63	31.96	9.07
B.LINE PEAK-GY.Y/SC XXX		295	39.48	9.70	32.19	9.17
Q.PEAK BLK-GY.Y/SC XXX		300	39.76	9.77	32.41	9.26
B.LINE PEAK BLK-GY.Y/SC XXX		305	40.05	9.84	32.62	9.35
Q.PEAK-GY.Y/TAA XXX		310	40.33	9.91	32.83	9.44
B.LINE PEAK-GY.Y/TAA XXX		315	40.62	9.98	33.04	9.53
Q.PEAK BLK-GY.Y/TAA XXX		320	40.90	10.05	33.24	9.63
B.LINE PEAK BLK-GY.Y/TAA XXX		325	41.19	10.12	33.44	9.72
Q.PEAK-GY.Y/MAX XXX		270-325	270	35.70	9.35	29.35
	275		35.70	9.42	29.55	8.80
	280		35.70	9.49	29.76	8.89
	285		35.70	9.56	29.95	8.98
	290		35.70	9.63	30.14	9.07
	295		35.70	9.70	30.33	9.17
	300		35.70	9.77	30.52	9.26
	305		35.70	9.84	30.70	9.35
	310		35.70	9.91	30.87	9.44
	315		35.70	9.98	31.05	9.53
	320	35.70	10.05	31.21	9.63	
	325	35.70	10.12	31.38	9.72	
Q.PEAK XXX	245-295	245	36.51	8.74	29.74	8.24
		250	36.82	8.83	30.01	8.33
		255	37.13	8.92	30.28	8.42
		260	37.44	9.02	30.54	8.51
		265	37.75	9.11	30.79	8.61
		270	38.06	9.20	31.04	8.70
		275	38.37	9.29	31.28	8.79
		280	38.68	9.39	31.52	8.88
		285	38.99	9.48	31.75	8.98
		290	39.30	9.57	31.97	9.07
	295	39.61	9.66	32.20	9.16	
Q.PEAK -GY XXX	245-295	245	36.51	8.74	29.74	8.24
MODULE M-GY XXX		250	36.82	8.83	30.01	8.33
		255	37.13	8.92	30.28	8.42
		260	37.44	9.02	30.54	8.51
		265	37.75	9.11	30.79	8.61
		270	38.06	9.20	31.04	8.70
		275	38.37	9.29	31.28	8.79
		280	38.68	9.39	31.52	8.88



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		285	38.99	9.48	31.75	8.98
		290	39.30	9.57	31.97	9.07
		295	39.61	9.66	32.20	9.16
Q.PEAK BLK XXX	245-295	245	36.91	8.79	29.58	8.28
		250	37.20	8.86	29.93	8.35
		255	37.49	8.92	30.27	8.42
		260	37.78	8.98	30.60	8.50
		265	38.07	9.05	30.93	8.57
		270	38.37	9.11	31.26	8.64
		275	38.66	9.18	31.58	8.71
		280	38.95	9.24	31.89	8.78
		285	39.24	9.30	32.20	8.85
		290	39.53	9.37	32.50	8.92
		295	39.82	9.43	32.80	8.99
Q.PEAK BLK-GY XXX	245-295	245	36.91	8.79	29.58	8.28
		250	37.20	8.86	29.93	8.35
		255	37.49	8.92	30.27	8.42
		260	37.78	8.98	30.60	8.50
		265	38.07	9.05	30.93	8.57
		270	38.37	9.11	31.26	8.64
		275	38.66	9.18	31.58	8.71
		280	38.95	9.24	31.89	8.78
		285	39.24	9.30	32.20	8.85
		290	39.53	9.37	32.50	8.92
		295	39.82	9.43	32.80	8.99
Q.PEAK L-GY.Y XXX B.LINE PEAK L-GY.Y XXX	330-390	330	46.00	9.42	37.51	8.80
		335	46.29	9.48	37.75	8.87
		340	46.57	9.54	37.99	8.95
		345	46.86	9.60	38.22	9.03
		350	47.14	9.65	38.44	9.10
		355	47.43	9.71	38.67	9.18
		360	47.71	9.77	38.89	9.26
		365	48.00	9.83	39.10	9.33
		370	48.28	9.89	39.32	9.41
		375	48.57	9.95	39.52	9.49
		380	48.85	10.00	39.73	9.56
		385	49.14	10.06	39.93	9.64
		390	49.42	10.12	40.13	9.72
Q.PRO L XXX MODULE L XXX	280-335	280	43.99	8.75	34.75	8.06
		285	44.27	8.79	35.09	8.12
		290	44.56	8.83	35.44	8.18
		295	44.84	8.87	35.77	8.25
		300	45.13	8.91	36.11	8.31



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		305	45.42	8.95	36.43	8.37
		310	45.70	8.99	36.76	8.43
		315	45.99	9.04	37.07	8.50
		320	46.27	9.08	37.39	8.56
		325	46.56	9.12	37.69	8.62
		330	46.84	9.16	38.00	8.68
		335	47.13	9.20	38.30	8.75
Q.PRO L-GY XXX B.LINE PRO L-GY XXX	280-335	280	43.97	8.65	34.86	8.03
		285	44.20	8.72	35.18	8.10
		290	44.44	8.78	35.49	8.17
		295	44.67	8.85	35.79	8.24
		300	44.90	8.92	36.09	8.31
		305	45.14	8.99	36.39	8.38
		310	45.37	9.06	36.68	8.45
		315	45.61	9.21	36.97	8.52
		320	45.84	9.19	37.25	8.59
		325	46.07	9.26	37.52	8.66
		330	46.31	9.33	37.80	8.73
		335	46.54	9.40	38.07	8.80
Q.PRO L-GY.Y XXX B.LINE PRO L-GY.Y XXX	280-355	280	43.90	8.59	35.12	7.97
		285	44.13	8.65	35.44	8.04
		290	44.36	8.72	35.75	8.11
		295	44.60	8.79	36.06	8.18
		300	44.83	8.86	36.36	8.25
		305	45.06	8.92	36.66	8.32
		310	45.29	8.99	36.96	8.39
		315	45.53	9.06	37.24	8.46
		320	45.76	9.13	37.53	8.53
		325	45.99	9.19	37.81	8.60
		330	46.23	9.26	38.08	8.67
		335	46.46	9.33	38.35	8.73
		340	46.69	9.40	38.69	8.80
		345	46.92	9.46	38.99	8.87
		350	47.16	9.53	39.28	8.94
		355	47.39	9.60	39.57	9.01
Q.PLUS L-GY B.LINE PLUS L-GY	280-335	280	44.12	8.99	33.68	8.31
		285	44.37	9.04	34.03	8.37
		290	44.63	9.09	34.38	8.43
		295	44.89	9.14	34.73	8.49
		300	45.14	9.19	35.07	8.55
		305	45.40	9.24	35.41	8.61
		310	45.66	9.29	35.74	8.67
		315	45.91	9.34	36.06	8.73
		320	46.17	9.39	36.39	8.79



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		325	46.43	9.44	36.70	8.85
		330	46.68	9.49	37.02	8.91
		335	46.94	9.54	37.33	8.97
Q.PLUS L-GY.Y XXX	280-355	280	43.99	8.99	33.68	8.31
B.LINE PLUS L-GY.Y XXX		285	44.25	9.04	34.03	8.37
Q.PLUS L-GY.Y/TAA XXX		290	44.50	9.09	34.38	8.43
B.LINE PLUS L-GY.Y/TAA XXX		295	44.76	9.14	34.73	8.49
		300	45.02	9.19	35.07	8.55
		305	45.27	9.24	35.41	8.61
		310	45.53	9.29	35.74	8.67
		315	45.79	9.34	36.06	8.73
		320	46.04	9.39	36.39	8.79
		325	46.30	9.44	36.70	8.85
		330	46.55	9.49	37.02	8.91
		335	46.81	9.54	37.33	8.97
		340	47.07	9.59	37.63	9.03
		345	47.32	9.64	37.93	9.09
		350	47.58	9.69	38.23	9.15
		355	47.83	9.74	38.52	9.21

**Notes:**

1. Rated electrical characteristics are within +/-10% of measured values at Standard Test Conditions of 100 mW/cm<sup>2</sup> irradiance, AM 1.5 spectrum, and cell temperature of 25°C.
2. 'Y' in the model number denotes the generation number between 1 and 9.
3. All modules are qualified for heavy accumulations (5400 Pa) of snow and ice.
4. "B.LINE + Suffix" module types are similar in construction, design, and material usages with the corresponding module type specified in the "Suffix", with the differences in the power tolerances and/or visual cosmetic classification."

**APPLICABLE REQUIREMENTS**

- ULC/ORD- C1703-01 - Flat-Plate Photovoltaic Modules and Panels
- UL 1703-3<sup>rd</sup> Edition - Flat-Plate Photovoltaic Modules and Panels