Q.PEAK DUO BLK ML-G10+ SERIES



385-410 Wp | 132 Cells 20.9 % Maximum Module Efficiency

MODEL Q.PEAK DUO BLK ML-G10+





Breaking the 20% efficiency barrier

Q.ANTUM DUO Z Technology with zero gap cell layout boosts module efficiency up to $20.9\,\%$.



A reliable investment

Inclusive 25-year product warranty and 25-year linear performance warranty¹.



Enduring high performance

Long-term yield security with Anti LeTID Technology and Hot-Spot Protect.



Extreme weather rating

High-tech aluminium alloy frame, certified for high snow (5400 Pa) and wind loads (4000 Pa).



Innovative all-weather technology

Optimal yields, whatever the weather with excellent low-light and temperature behaviour.



The most thorough testing programme in the industry

Qcells is the first solar module manufacturer to pass the most comprehensive quality programme in the industry: The new "Quality Controlled PV" of the independent certification institute TÜV Rheinland.

¹ See data sheet on rear for further information.

The ideal solution for:







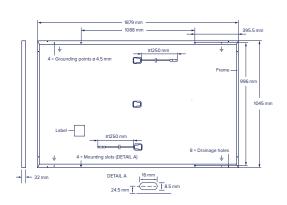




Q.PEAK DUO BLK ML-G10+ SERIES

■ Mechanical Specification

Format	1879 mm × 1045 mm × 32 mm (including frame)
Weight	22.0 kg
Front Cover	3.2 mm thermally pre-stressed glass with anti-reflection technology
Back Cover	Composite film
Frame	Black anodised aluminium
Cell	6 × 22 monocrystalline Q.ANTUM solar half cells
Junction box	53-101 mm × 32-60 mm × 15-18 mm Protection class IP67, with bypass diodes
Cable	4 mm² Solar cable; (+) ≥1250 mm, (-) ≥1250 mm
Connector	Stäubli MC4; IP68



■ Electrical Characteristics

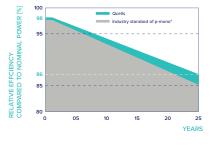
PC	WER CLASS		385	390	395	400	405	410			
MIN	MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC1 (POWER TOLERANCE +5 W/-0 W)										
	Power at MPP ¹	P_{MPP}	385	390	395	400	405	410			
_	Short Circuit Current ¹	I _{sc}	11.04	11.07	11.10	11.14	11.17	11.20			
unu.	Open Circuit Voltage ¹	V _{oc}	45.19	45.23	45.27	45.30	45.34	45.37			
in in	Current at MPP	I _{MPP}	10.59	10.65	10.71	10.77	10.83	10.89			
2	Voltage at MPP	V_{MPP}	36.36	36.62	36.88	37.13	37.39	37.64			
	Efficiency ¹	η	≥19.6	≥19.9	≥20.1	≥20.4	≥20.6	≥20.9			

MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT²

	Power at MPP	P _{MPP}	288.8	292.6	296.3	300.1	303.8	307.6
Ę	Short Circuit Current	I _{sc}	8.9	8.92	8.95	8.97	9.00	9.03
Minim	Open Circuit Voltage	V _{oc}	42.62	42.65	42.69	42.72	42.76	42.79
	Current at MPP	I _{MPP}	8.35	8.41	8.46	8.51	8.57	8.62
	Voltage at MPP	V _{MPP}	34.59	34.81	35.03	35.25	35.46	35.68

 $\label{eq:local_equation} $$ \mbox{Measurement tolerances P}_{\mbox{MPP}} \pm 3\%; \mbox{I}_{\mbox{Sc}}; \mbox{V}_{\mbox{OC}} \pm 5\% \mbox{ at STC: } 1000 \mbox{W/m}^2, 25 \pm 2\mbox{°C}, \mbox{AM 1.5 according to IEC } 60904-3 \cdot ^2800 \mbox{W/m}^2, \mbox{NMOT}, \mbox{spectrum AM 1.5 according to IEC } 60904-3 \cdot ^2800 \mbox{W/m}^2, \mbox{NMOT}, \mbox{spectrum AM 1.5 according to IEC } 1000 \mbox{W/m}^2, \mbox{NMOT}, \mbox{spectrum AM 1.5 according to IEC } 1000 \mbox{W/m}^2, \mbox{NMOT}, \mbox{spectrum AM 1.5 according to IEC } 1000 \mbox{W/m}^2, \mbox{NMOT}, \mbox{spectrum AM 1.5 according to IEC } 1000 \mbox{W/m}^2, \mbox{NMOT}, \mbox{Spectrum AM 1.5 according to IEC } 1000 \mbox{W/m}^2, \mbox{NMOT}, \mbox{Spectrum AM 1.5 according to IEC } 1000 \mbox{W/m}^2, \mbox{NMOT}, \mbox{Spectrum AM 1.5 according to IEC } 1000 \mbox{W/m}^2, \mbox{NMOT}, \mbox{Spectrum AM 1.5 according to IEC } 1000 \mbox{W/m}^2, \mbox{NMOT}, \mbox{Spectrum AM 1.5 according to IEC } 1000 \mbox{W/m}^2, \mbox{NMOT}, \mbox{Spectrum AM 1.5 according to IEC } 1000 \mbox{W/m}^2, \mbox{NMOT}, \mbox{Spectrum AM 1.5 according to IEC } 1000 \mbox{W/m}^2, \mbox{NMOT}, \mbox{Spectrum AM 1.5 according to IEC } 1000 \mbox{W/m}^2, \mbox{NMOT}, \mbox{Spectrum AM 1.5 according to IEC } 1000 \mbox{W/m}^2, \mbox{NMOT}, \mbox{Spectrum AM 1.5 according to IEC } 1000 \mbox{W/m}^2, \mbox{NMOT}, \mbox{Spectrum AM 1.5 according to IEC } 1000 \mbox{W/m}^2, \mbox{NMOT}, \mbox{Spectrum AM 1.5 according to IEC } 1000 \mbox{W/m}^2, \mbox{NMOT}, \mbox{Spectrum AM 1.5 according to IEC } 1000 \mbox{W/m}^2, \mbox{NMOT}, \mbox{NM$

Qcells PERFORMANCE WARRANTY

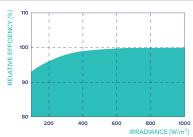


At least 98% of nominal power during first year. Thereafter max. 0.5% degradation per year. At least 93.5% of nominal power up to 10 years. At least 86% of nominal power up to 25 years.

All data within measurement tolerances. Full warranties in accordance with the warranty terms of the Ocells sales organisation of your respective country.

*Standard terms of guarantee for the 5 PV companies with the highest production capacity in 2021 (February 2021)

PERFORMANCE AT LOW IRRADIANCE



Typical module performance under low irradiance conditions in comparison to STC conditions ($25\,^{\circ}\text{C}$, $1000\,\text{W/m}^2$).

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]	-0.34	Nominal Module Operating Temperature	NMOT	[°C]	43±3		

■ Properties for System Design

Maximum System Voltage	V_{SYS}	[V]	1000	PV module classification	Class II
Maximum Reverse Current	I _R	[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

Quality Controlled PV -TÜV Rheinland; IEC 61215:2016; IEC 61730:2016 This data sheet complies with DIN EN 50380.

Made in Malaysia





■ Packaging Information













24 pallets









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