



# Mid Cambridge Neighborhood Conservation District Commission

Cambridge Historical Commission, 831 Massachusetts Ave., 2<sup>nd</sup> Fl., Cambridge, MA 02139  
 Telephone: 617-349-4683 TTY: 617-349-6112 histncds@cambridgema.gov  
 www.cambridgema.gov/Historic/DistrictsHistoricProperties/MidCambridgeNCD

## APPLICATION FOR CERTIFICATE

### Section I:

1. The undersigned hereby applies to the Mid Cambridge Neighborhood Conservation District Commission for a Certificate of (check type of certificate):  Appropriateness,  Nonapplicability, or  Hardship, in accordance with Ch. 2.78 of the Municipal Code and the order establishing the district.

2. Address of property: 17 R Ellsworth Ave, Cambridge, Massachusetts

3. Describe the proposed alteration(s), construction, or demolition in the space provided below:  
 (An additional page can be attached, if necessary).

*Installation of solar panels on the roof.  
 See picture for details*

Name of Property Owner of Record: <u>Larch Properties LLC</u>	
Mailing Address: <u>Larch Properties LLC</u>	<u>Larch Properties LLC</u>
<u>109 Larch Road</u>	<u>109 Larch Road</u>
<u>Cambridge, Massachusetts 02138</u>	<u>Cambridge, Massachusetts 02138</u>
Telephone/Fax: <u>617 696 8993</u>	E-mail: <u>peter.libby@mac.com</u>
Signature of Property Owner of Record*: <u>Peter Libby, Manager</u>	
(Required field; application will not be considered complete without property owner's signature)	
*I have read the application in full and certify that the information contained herein is true and accurate to the best of my knowledge and belief.	
Name of proponent, if not record owner: <u>Pauke Corstens (tenant)</u>	
Mailing Address: <u>17 R Ellsworth Ave, Cambridge, MA 02139</u>	
Telephone/Fax: <u>415 713 6327</u>	E-mail: <u>paukecorstens@gmail.com</u>

<i>(for office use only):</i>			
Date Application Received: _____	Case Number: _____	Hearing Date: _____	
Type of Certificate Issued: _____	Date Issued: _____		

**Section II:**

Is property listed on the National Register of Historic Places? No Publicly owned? No  
Current Zoning District: Mid Cambridge Current Use: Residential

**Section III:**

Will this project require: variance No special permit \_\_\_\_\_

If yes, nature of zoning relief sought: setbacks \_\_\_\_\_ FAR \_\_\_\_\_ use \_\_\_\_\_  
height \_\_\_\_\_ parking \_\_\_\_\_ other (explain) \_\_\_\_\_

**Section IV (Complete any portions that apply to proposed scope of work):**

**New Construction or Additions:**

- \_\_\_\_\_ floor area of existing structures on the lot
- \_\_\_\_\_ amount of floor area (gross square feet) of proposed construction
- \_\_\_\_\_ percentage increase in total floor area after construction
- \_\_\_\_\_ total area of lot in square feet
- \_\_\_\_\_ percentage of total lot area covered after construction

**Demolition:**

- \_\_\_\_\_ amount of floor area (gross square feet) of proposed demolition
- \_\_\_\_\_ floor area of existing structure
- \_\_\_\_\_ percentage decrease in total floor area after demolition

**Alterations:**

Does the proposed work include (check all that apply):

- \_\_\_\_\_ enclosure or removal of decorative elements (including cornice, fascia, soffit, bay, porch, hood, cornerboard, window sash, or window or door casing);
- \_\_\_\_\_ increase or reduction of window or door size;
- \_\_\_\_\_ relocation of windows or doors;
- solar panel installation on the roof \_\_\_\_\_ change in slope, pitch, or configuration of roof;
- \_\_\_\_\_ removal of original or historic roofing material.





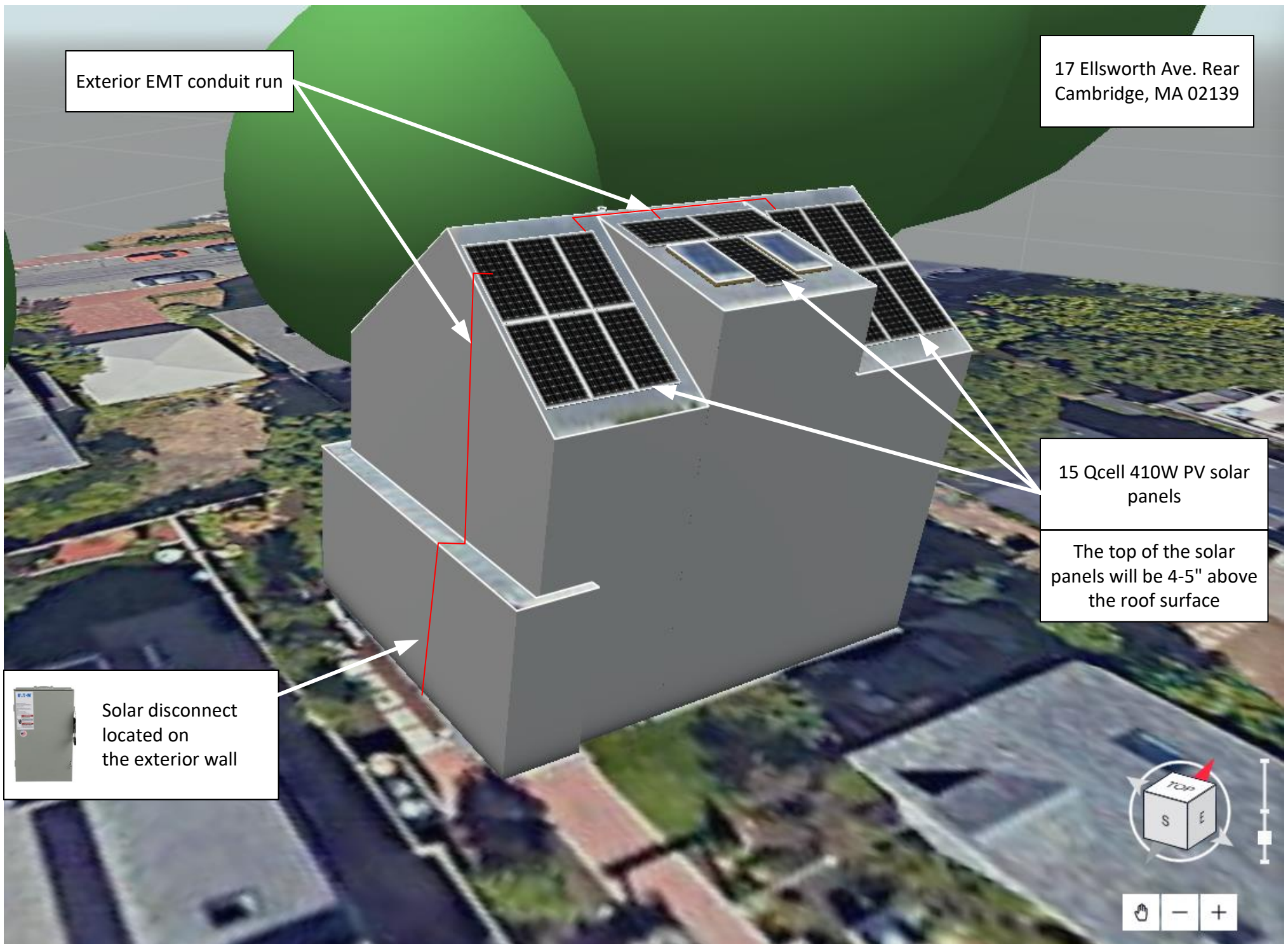
17 Ellsworth Ave. Rear  
Cambridge, MA 02139

Exterior EMT conduit run

15 Qcell 410W PV solar panels

The top of the solar panels will be 4-5" above the roof surface

Solar disconnect located on the exterior wall





Exterior EMT conduit run

17 Ellsworth Ave. Rear  
Cambridge, MA 02139



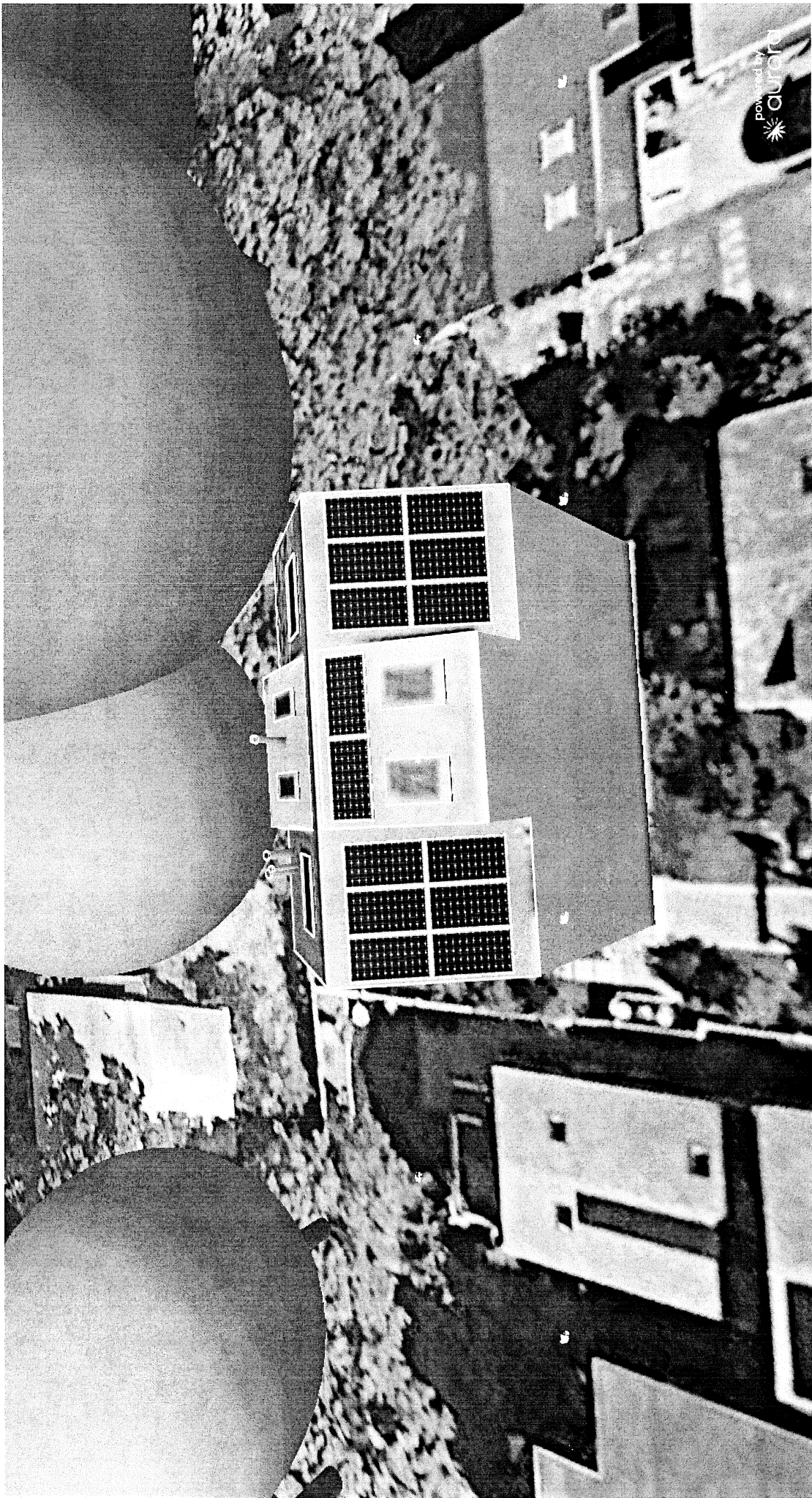
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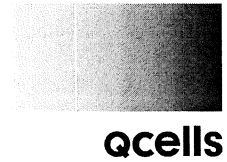
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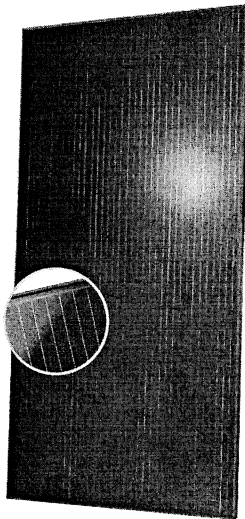


# Q.PEAK DUO BLK ML-G10+ SERIES

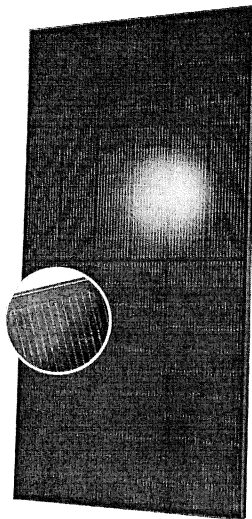


385-410 Wp | 132 Cells  
20.9% Maximum Module Efficiency

MODEL Q.PEAK DUO BLK ML-G10+



6 busbar  
cell technology



12 busbar  
cell technology



### 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 warranty<sup>1</sup>.



### Enduring high performance

Long-term yield security with Anti LeTID Technology, Anti PID Technology<sup>2</sup> 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.

<sup>1</sup> See data sheet on rear for further information.

<sup>2</sup> APT test conditions according to IEC/TS 62804-1:2015, method A (-1500 V, 96 h)

The ideal solution for:



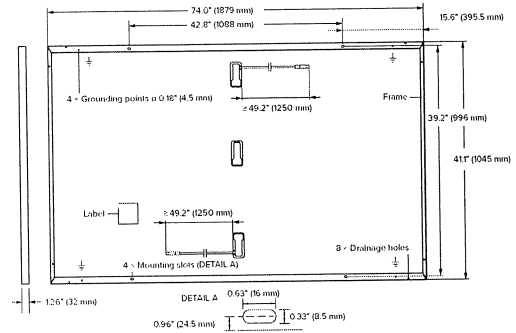
Rooftop arrays on  
residential buildings



# QCELLS Q.FEAT-DUC-BLK-ML-G10+ SERIES

## Mechanical Specification

Format	74.0 in × 41.1 in × 1.26 in (including frame) (1879 mm × 1045 mm × 32 mm)
Weight	48.5 lbs (22.0 kg)
Front Cover	0.13 in (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	2.09-3.98 in × 1.26-2.36 in × 0.59-0.71 in (53-101 mm × 32-60 mm × 15-18 mm), IP67, with bypass diodes
Cable	4 mm <sup>2</sup> Solar cable: (+) > 49.2 in (1250 mm), (-) > 49.2 in (1250 mm)
Connector	Staubli MC4; IP68



## Electrical Characteristics

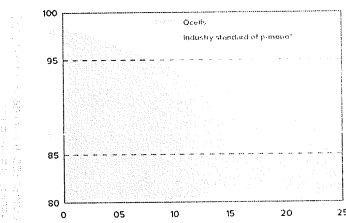
POWER CLASS		385	390	395	400	405	410
MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC <sup>1</sup> (POWER TOLERANCE +5W/-0W)							
Power at MPP <sup>1</sup>	$P_{MPP}$ [W]	385	390	395	400	405	410
Short Circuit Current <sup>1</sup>	$I_{SC}$ [A]	11.04	11.07	11.10	11.14	11.17	11.20
Open Circuit Voltage <sup>1</sup>	$V_{OC}$ [V]	45.19	45.23	45.27	45.30	45.34	45.37
Current at MPP	$I_{MPP}$ [A]	10.59	10.65	10.71	10.77	10.83	10.89
Voltage at MPP	$V_{MPP}$ [V]	33.36	36.62	36.88	37.13	37.39	37.64
Efficiency <sup>1</sup>	$\eta$ [%]	≥19.6	≥19.9	≥20.1	≥20.4	≥20.6	≥20.9

MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT<sup>2</sup>

Power at MPP	$P_{MPP}$ [W]	288.8	292.6	296.3	300.1	303.8	307.6
Short Circuit Current	$I_{SC}$ [A]	8.90	8.92	8.95	8.97	9.00	9.03
Open Circuit Voltage	$V_{OC}$ [V]	42.62	42.65	42.69	42.72	42.76	42.79
Current at MPP	$I_{MPP}$ [A]	8.35	8.41	8.46	8.51	8.57	8.62
Voltage at MPP	$V_{MPP}$ [V]	34.59	34.81	35.03	35.25	35.46	35.68

<sup>1</sup>Measurement tolerances  $P_{MPP}$  ±3%;  $I_{SC}$ ,  $V_{OC}$  ±5% at STC: 1000 W/m<sup>2</sup>, 25 ± 2°C, AM 1.5 according to IEC 60904-3 • <sup>2</sup>800 W/m<sup>2</sup>, NMOT, spectrum AM 1.5

## Qcells PERFORMANCE WARRANTY

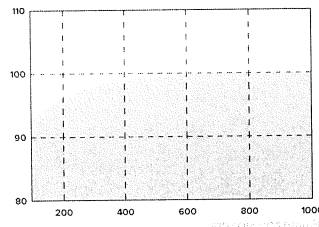


At least 98% of nominal power during first year. Thereafter max. 0.5% degradation per year. At least 93.5% of nominal power up to 10 years. At least 86% of nominal power up to 25 years.

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

<sup>1</sup>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°C, 1000 W/m<sup>2</sup>).

## TEMPERATURE COEFFICIENTS

Temperature Coefficient of $I_{SC}$	$\alpha$ [%/K]	+0.04	Temperature Coefficient of $V_{OC}$	$\beta$ [%/K]	-0.27
Temperature Coefficient of $P_{MPP}$	$\gamma$ [%/K]	-0.34	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 <sup>2</sup>	[lbs./ft <sup>2</sup> ]	75 (3600 Pa)/55 (2660 Pa)	Permitted Module Temperature on Continuous Duty	-40°F up to +185°F (-40°C up to +85°C)
Max. Test Load, Push/Pull <sup>2</sup>	[lbs./ft <sup>2</sup> ]	113 (5400 Pa)/84 (4000 Pa)		

<sup>2</sup> See Installation Manual

## Qualifications and Certificates

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



Specifications subject to technical changes © Qcells Q.FEAT-DUC-BLK-ML-G10+ series\_385-410\_2023-01\_Rev03\_NA