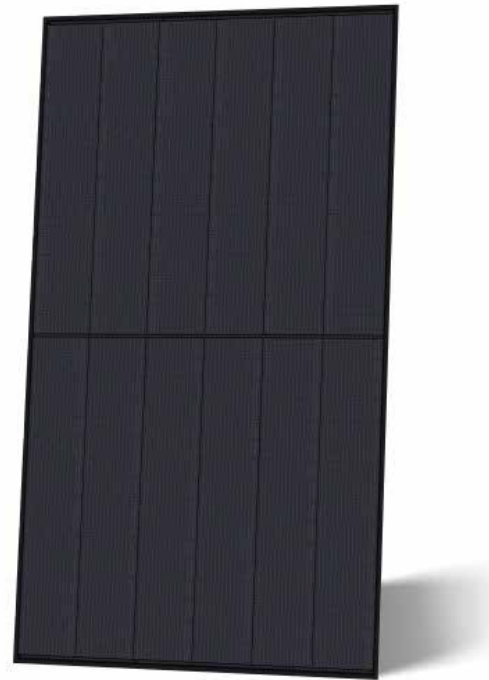


## 48QL6-DB

460-485 Watt

ALL BLACK MONO-FACIAL MODULE  
WITH DUAL GLASS



### Higher Power on Front Side

Leading power class based on the enhanced N-type TOPCon platform, achieved through cutting-edge technology and an optimized layout that captures more sunlight.



### Optimized Heat resistance

Optimized temperature coefficient achieved via advanced graphical patterning, busbar and multi-cell technology.



### Proven Low Light Performance

Enhanced cell structure ensures superior module performance under low-light conditions.



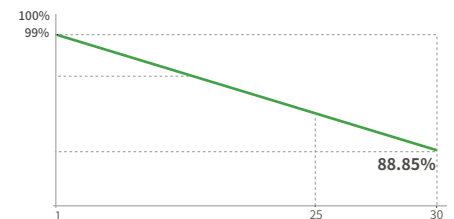
### Industry Leading Warranty

Advanced metallization and iterated module encapsulation deliver superior resistance to PID, LID / LeTID, and UV degradation.



### Mechanical Load Enhanced

Certified to withstand:  
5400 Pa front side max static test load  
2400 Pa rear side max static test load



**25 Year** Product Warranty | **30 Year** Linear Power Warranty | **1%** First-year Degradation | **0.35%** Annual Degradation Over 30 Years

- IEC61215:2021 / IEC61730:2023
- IEC61701 / IEC62716 / IEC60068 / IEC62804
- ISO9001:2015: Quality Management System
- ISO14001:2015: Environment Management System
- ISO45001:2018: Occupational health and safety management systems



**JKM460-485N-48QL6-DB-F2-OC**

# 48QL6-DB 460-485 Watt

## Mechanical Characteristics

|                                        |                                                                                 |
|----------------------------------------|---------------------------------------------------------------------------------|
| Cell Type                              | N- type Mono-crystalline                                                        |
| No. of cells                           | 192 (48×4)                                                                      |
| Dimensions                             | 1762×1134×30 mm                                                                 |
| Weight                                 | 21.5 kg                                                                         |
| Front Glass                            | 1.6 mm, Anti-reflection Coating                                                 |
| Back Glass                             | 1.6 mm, Heat Strengthened Glass                                                 |
| Frame                                  | Anodized Aluminium Alloy                                                        |
| Junction Box                           | IP68 Rated                                                                      |
| Protection Class                       | Class II                                                                        |
| IEC Fire Type                          | Class C                                                                         |
| Connector Type                         | PV-JK03M/xy,PV-03M2/xy (Jinko) ;<br>PV-KST4-EVO2A/xy,PV-KBT4-EVO2A/xy (Staubli) |
| Output Cables<br>(Including Connector) | ≥4.0 mm <sup>2</sup><br>(+): 600 mm , (-): 400 mm or Customized Length          |

\* MC4-EVO2 available upon request and subject to availability

## Packaging Configuration

|                                             |                                                           |
|---------------------------------------------|-----------------------------------------------------------|
| Pallet Dimensions                           | 1792×1140×1249 mm                                         |
| Packing Detail<br>(Two pallets = One stack) | 37 pcs/pallets, 74 pcs/stack,<br>962 pcs/ 40'HQ Container |

## Specifications (STC)

|                                             |            |       |       |       |       |       |
|---------------------------------------------|------------|-------|-------|-------|-------|-------|
| Maximum Power - P <sub>max</sub> [Wp]       | 460        | 465   | 470   | 475   | 480   | 485   |
| Maximum Power Voltage - V <sub>mp</sub> [V] | 30.63      | 30.80 | 30.97 | 31.13 | 31.32 | 31.50 |
| Maximum Power Current - I <sub>mp</sub> [A] | 15.02      | 15.10 | 15.18 | 15.26 | 15.33 | 15.40 |
| Open-circuit Voltage - V <sub>oc</sub> [V]  | 35.69      | 35.94 | 36.19 | 36.44 | 36.69 | 36.94 |
| Short-circuit Current - I <sub>sc</sub> [A] | 15.70      | 15.75 | 15.80 | 15.85 | 15.89 | 15.94 |
| Module Efficiency STC [%]                   | 23.02      | 23.27 | 23.52 | 23.77 | 24.02 | 24.27 |
| Power Measurement Tolerance                 | ± 3%       |       |       |       |       |       |
| Power Sorting                               | -5W ~ +15W |       |       |       |       |       |
| Temperature Coefficient of P <sub>max</sub> | -0.26 %/°C |       |       |       |       |       |
| Temperature Coefficient of V <sub>oc</sub>  | -0.24 %/°C |       |       |       |       |       |
| Temperature Coefficient of I <sub>sc</sub>  | 0.046 %/°C |       |       |       |       |       |

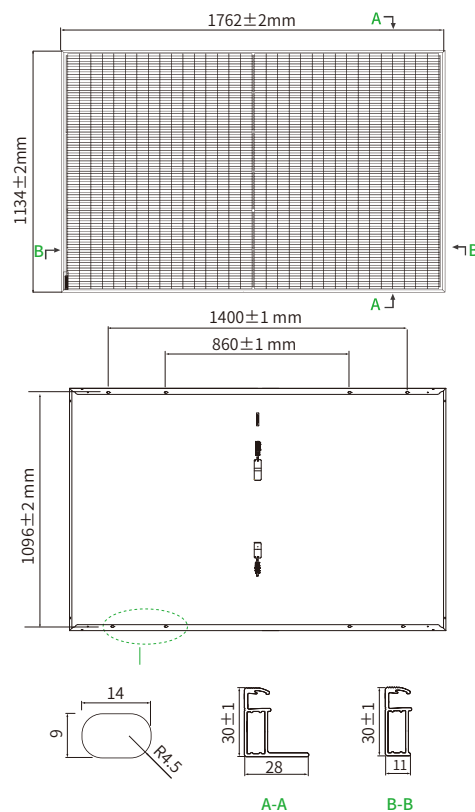
STC: Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, AM=1.5

## Application Conditions

|                               |                     |
|-------------------------------|---------------------|
| Level T <sub>gs</sub> ≤ 70 °C | - 40 °C to + 70 °C* |
| Maximum System Voltage        | 1500 VDC (IEC)      |
| Maximum Series Fuse Rating    | 30 A                |

\*Short-term up to 85°C; higher operation requires IEC TS 63126 testing

## Engineering Drawings



\*Note: For specific dimensions and tolerance ranges, please refer to the corresponding detailed module drawings.

## Electrical Performance

