

## 51QL6-DV

495-520 Watt

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.



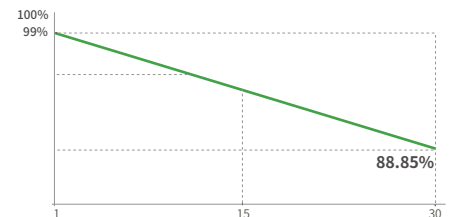
### Industry Leading Warranty

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



**15 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



POSITIVE QUALITY™  
Continuous Quality Assurance

**JKM495-520N-51QL6-DV-F3-EN**

# 51QL6-DV 495-520 Watt

## Mechanical Characteristics

|                                        |                                                                        |
|----------------------------------------|------------------------------------------------------------------------|
| Cell Type                              | N- type Mono-crystalline                                               |
| No. of cells                           | 204 (51×4)                                                             |
| Dimensions                             | 1906×1134×30 mm                                                        |
| Weight                                 | 23.0 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                         | JK03M / JK03M2 / Others*                                               |
| 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                           | 1981×1140×1249 mm                                         |
| Packing Detail<br>(Two pallets = One stack) | 37 pcs/pallets, 74 pcs/stack,<br>888 pcs/ 40'HQ Container |

## Specifications (STC)

|                                             |            |       |       |       |       |       |
|---------------------------------------------|------------|-------|-------|-------|-------|-------|
| Maximum Power - P <sub>max</sub> [Wp]       | 495        | 500   | 505   | 510   | 515   | 520   |
| Maximum Power Voltage - V <sub>mp</sub> [V] | 32.74      | 32.90 | 33.05 | 33.21 | 33.36 | 33.51 |
| Maximum Power Current - I <sub>mp</sub> [A] | 15.12      | 15.20 | 15.28 | 15.36 | 15.44 | 15.52 |
| Open-circuit Voltage - V <sub>oc</sub> [V]  | 38.18      | 38.44 | 38.69 | 38.94 | 39.19 | 39.44 |
| Short-circuit Current - I <sub>sc</sub> [A] | 15.75      | 15.80 | 15.85 | 15.90 | 15.95 | 15.99 |
| Module Efficiency STC [%]                   | 22.90      | 23.13 | 23.36 | 23.60 | 23.83 | 24.06 |
| Power Tolerance                             | 0 ~ +3 %   |       |       |       |       |       |
| 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 |       |       |       |       |       |

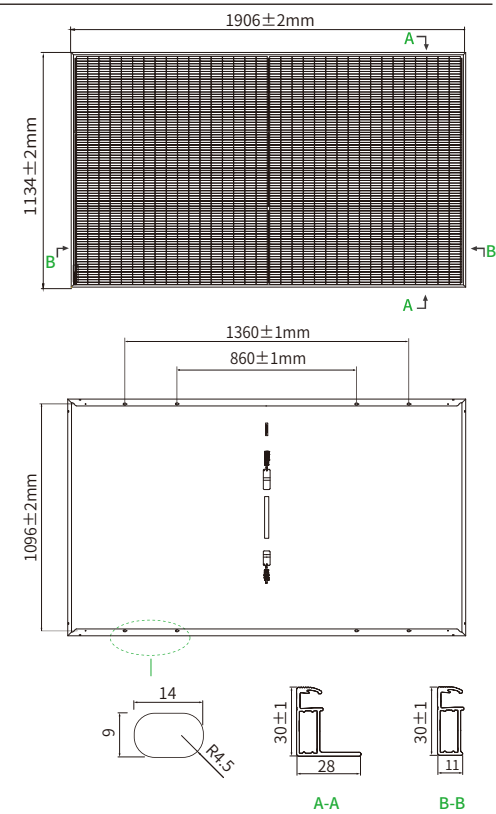
STC: Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, AM=1.5

## Application Conditions

|                               |                     |
|-------------------------------|---------------------|
| Level T <sub>g8</sub> ≤ 70 °C | - 40 °C to + 70 °C* |
| Maximum System Voltage        | 1500 VDC (IEC)      |
| Maximum Series Fuse Rating    | 30 A                |

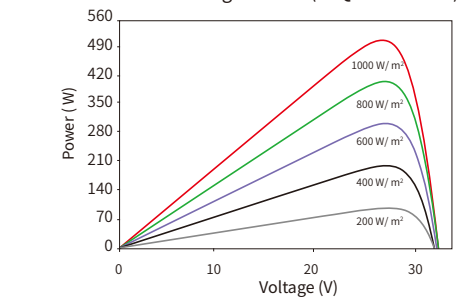
\*Short-term up to 85°C; higher operation requires IEC TS 63126 testing

## Engineering Drawings



## Electrical Performance

Power-Voltage Curves (51QL6-DV 505W)



Current-Voltage Curves (51QL6-DV 505W)

