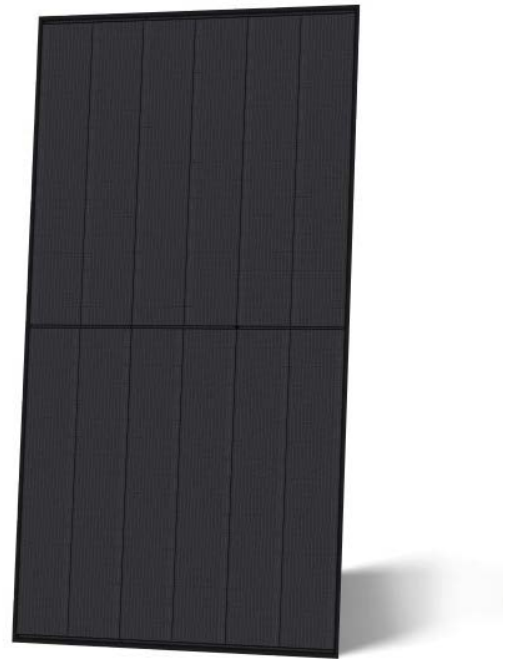


51QL6-DB

475-510 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.



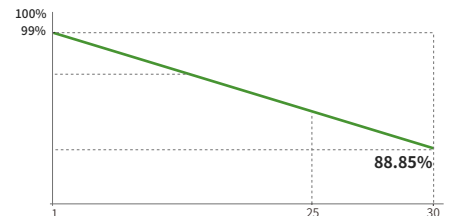
Proven Low Light Performance

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



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
- ISO9001:2015: Quality Management System
- ISO14001:2015: Environment Management System
- ISO45001:2018: Occupational health and safety management systems



JKM475-510N-51QL6-DB-F3C1-OC

JKMxxxN-51QL6-DB (xxx=475-510, in steps of 5)

Mechanical Characteristics

Cell Type	N- type Mono-crystalline
No. of cells	204 (51×4)
Dimensions	1906×1134×30 mm
Weight	23.7 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-JK03M2/xy (JinKO) ; PV-KST4-EVO2A/xy,PV-KBT4-EVO2A/xy (Staubli)
Output Cables (Including Connector)	≥4.0 mm ² (+): 600 mm , (-):400 mm or Customized Length

* MC4-EVO2 available upon request and subject to availability

Packaging Configuration

Pallet Dimensions	1936×1140×1249 mm
Packing Detail (Two pallets = One stack)	37 pcs/pallets, 74 pcs/stack, 888 pcs/ 40'HQ Container

Specifications (STC)

Maximum Power - Pmax [Wp]	475 480 485 490 495 500 505 510
Maximum Power Voltage - Vmp [V]	32.14 32.31 32.47 32.63 32.79 32.94 33.10 33.25
Maximum Power Current - Imp [A]	14.78 14.86 14.94 15.02 15.10 15.18 15.26 15.34
Open-circuit Voltage - Voc [V]	37.22 37.47 37.72 37.97 38.22 38.47 38.72 38.96
Short-circuit Current - Isc [A]	15.65 15.70 15.75 15.80 15.85 15.90 15.95 16.00
Module Efficiency STC [%]	21.98 22.21 22.44 22.67 22.90 23.13 23.36 23.60
Measurement Tolerance	STC:Pmax ±3%, Voc ±5%, Isc ±5%
Power Sorting	-5W ~ +15W
Temperature Coefficient of Pmax	-0.26 %/°C
Temperature Coefficient of Voc	-0.24 %/°C
Temperature Coefficient of Isc	0.046 %/°C

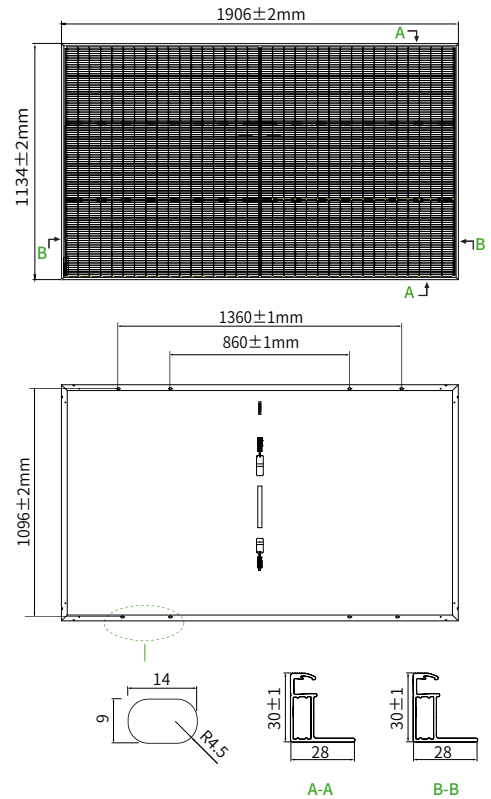
STC: Irradiance 1000W/m², Cell Temperature 25°C, AM=1.5

Application Conditions

Operating Temperature	- 40 °C ~ + 70 °C*
Module [T98]max	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

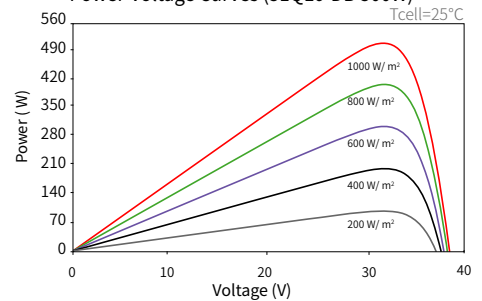
Engineering Drawings



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

Electrical Performance

Power-Voltage Curves (51QL6-DB 500W)



Current-Voltage Curves (51QL6-DB 500W)

