

TIGER Neo 5.0

48HL6M-DB 485-510 Watt

ALL-BLACK TAC MODULE FOR ELITE



Ultra High Efficiency

Innovative cell design with hybrid passivation drives module efficiency to 25.52%, delivering more energy from the limited rooftop area.



Aesthetic Appeal

Full-black cells with a busbar-free front create a flawless, gap-free surface that blends into the roofline and elevates the product's visual appeal.



Heat Resistance

A best-in-class $-0.24\%/^{\circ}\text{C}$ power temperature coefficient minimizes output loss in high heat and strengthens performance under elevated temperatures.



Lifelong Warranty Service*

Reliable product design and encapsulation structure brings end-user lifelong energy generation.



Free Replacement

*Free replacement if module output falls below 70% of rated power

1 %

First-year Degradation

0.35 %

Annual Degradation



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POSITIVE QUALITY™
Continuous Quality Assurance

JKM485-510T-48HL6M-DB-F1-EN

*For the detailed terms please refer to the warranty manual

48HL6M-DB 485-510 Watt

Mechanical Characteristics

Cell Type	N- type Mono-crystalline
No. of cells	96 (48×2)
Dimensions	1762×1134×30 mm
Weight	22.0 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 (Including Connector)	≥4.0 mm ² (+): 500 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 (Two pallets = One stack)	37 pcs/pallets, 74 pcs/stack, 962 pcs/ 40'HQ Container

Specifications (STC)

Maximum Power - P _{max} [Wp]*	485	490	495	500	505	510
Maximum Power Voltage - V _{mp} [V]	31.19	31.29	31.39	31.49	31.58	31.68
Maximum Power Current - I _{mp} [A]	15.55	15.66	15.77	15.88	15.99	16.10
Open-circuit Voltage - V _{oc} [V]	35.98	36.08	36.18	36.28	36.38	36.48
Short-circuit Current - I _{sc} [A]	16.52	16.63	16.74	16.85	16.96	17.07
Module Efficiency STC [%]	24.27	24.52	24.77	25.02	25.27	25.52
Power Sorting	0 ~ + 3 %					
Temperature Coefficient of P _{max}	-0.24 %/°C					
Temperature Coefficient of V _{oc}	-0.21 %/°C					
Temperature Coefficient of I _{sc}	0.050 %/°C					

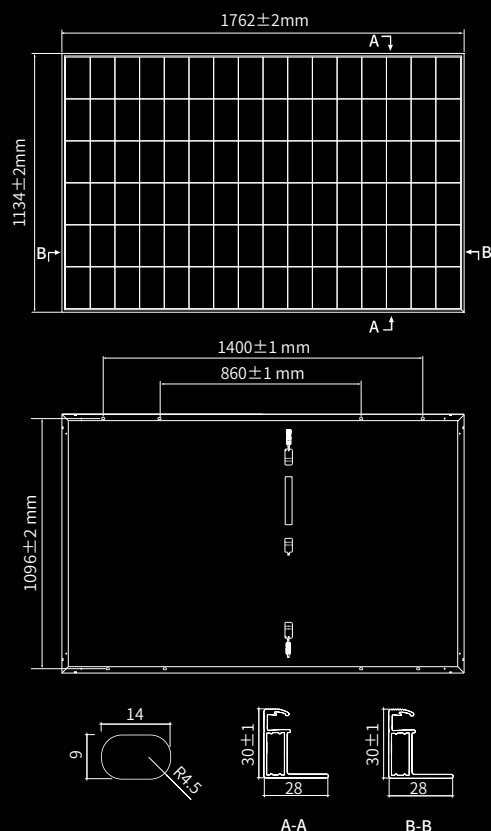
STC: Irradiance 1000W/m², Cell Temperature 25°C, AM=1.5. *Power measurement tolerance: ±3%.

Application Conditions

Level T _g ≤ 70 °C	- 40 °C to + 70 °C*
Maximum System Voltage	1500 V DC (IEC)
Maximum Series Fuse Rating	30 A

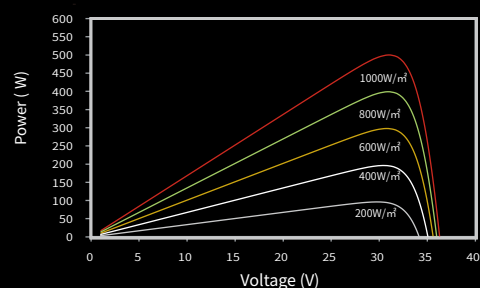
*Short-term up to 85°C; higher operation requires IEC TS 63126 testing

Engineering Drawings



Electrical Performance

Power-Voltage Curves (48HL6M-DB 500W)



Current-Voltage Curves (48HL6M-DB 500W)

