



**430~455W**

Aquaman series

**Mono SMBB TOPCon  
full black double glass solar panel**

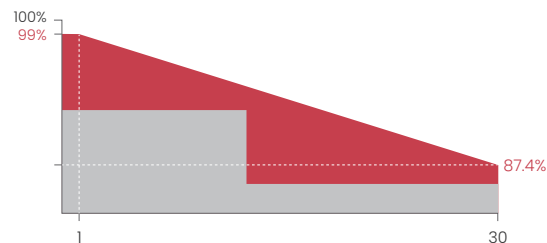
Elegant design in all-black appearance, harmonious integration with the components of the building to provide an intense aesthetic experience. Products can match different installation conditions, taking into account high adaptability and high compatibility. With mature support and inverter scheme, customized design for distributed scenarios.

### MODULE CHARACTER

-  Exceptional PID Resistance
-  Salt mist resistance/Ammonia resistance /dust and hail resistance
-  Production process reliability test
-  0~+3% Positive Tolerance
-  Lower LID / LETID
-  Aesthetic appearance design
-  Reduce BOS cost increase ROI
-  Non-destructive cutting

### CERTIFICATION

- IEC61215/IEC61730
- ISO9001:Quality Management System
- ISO14001:Environmental Management System
- ISO45001:Occupational Health and Safety Management System



Linear performance warranty



Product warranty



Electrical Characteristics(STC)						
Maximum Power:Pmax[W]	430	435	440	445	450	455
Open Circuit Vlotage: Voc [V]	38.56	38.79	39.02	39.25	39.48	39.71
Short Circuit Current: Isc [A]	14.26	14.34	14.42	14.50	14.58	14.65
Voltage at Maximum Power: Vmp [V]	31.86	32.05	32.24	32.43	32.62	32.81
Current at Maximum Power: Imp [A]	13.50	13.58	13.65	13.73	13.80	13.87
Module Efficiency: $\eta$ [%]	21.52	21.77	22.02	22.27	22.52	22.77

\*STC: Irradiance 1000W/m<sup>2</sup>, Cell temperature 25°C, AM=1.5, Power measurement tolerance: ±3%

Electrical Characteristics(BNPI)						
Maximum Power:Pmax[W]	476.44	481.98	487.52	493.06	498.6	504.14
Open Circuit Vlotage: Voc [V]	38.56	38.79	39.02	39.25	39.48	39.71
Short Circuit Current: Isc [A]	15.79	15.88	15.97	16.06	16.14	16.23
Voltage at Maximum Power: Vmp [V]	31.86	32.05	32.24	32.43	32.62	32.81
Current at Maximum Power: Imp [A]	14.95	15.04	15.12	15.20	15.29	15.37

\* BNPI: Front side irradiance 1000W/m<sup>2</sup>, Rear side irradiance 135W/m<sup>2</sup>, Cell Temperature=25°C, AM=1.5, Power measurement tolerance:±3%

Electrical characteristics with different rear side power gain							
<b>5%</b>	Maximum power:Pmax [W]	451.50	456.75	462.00	467.25	472.50	477.75
<b>15%</b>	Maximum power:Pmax [W]	494.50	500.25	506.00	511.75	517.50	523.25
<b>25%</b>	Maximum power:Pmax [W]	537.50	543.75	550.00	556.25	562.50	568.75

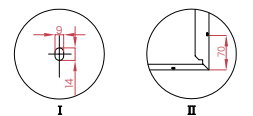
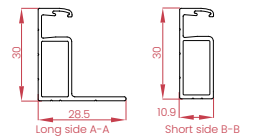
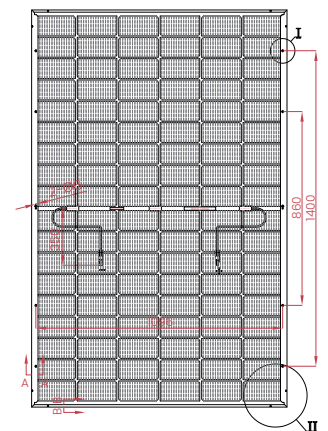
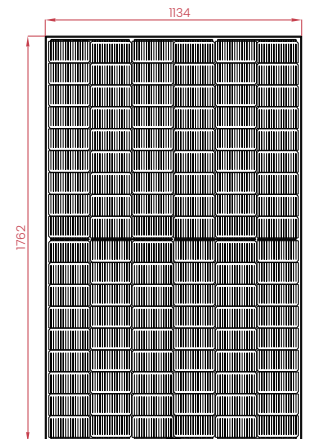
Temperature Rating	
Temperature Coefficient of Pmax	-0.26%/°C
Temperature Coefficient of Voc	-0.24%/°C
Temperature Coefficient of Isc	+0.046%/°C

Operating Parameters	
Operating Temperature	-40°C ~ +70°C
Maximum System Voltage	1500V DC
Maximum Series Fuse Rating	30A
Power Output Tolerance	0 ~ +3%
Bifaciality coefficient of Pmax/Voc/Isc	80±5%/98±5%/80±5%

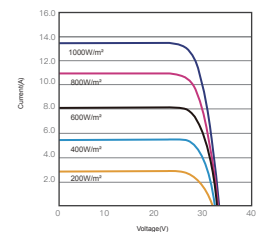
Mechanical Parameters	
Cell type	N-type Mono-Crystalline
Cell Orientation	108(6×18)
Front /Rear Glass	2.0mm AR coating semi tempered glass/2.0mm Semi tempered glass
Electrical Protection Class	Anodized aluminum alloy frame
Frame	Class II
IEC Fire Safety Class	Class C
Junction Box	IP68, 3 diodes
Cable&Connector	4mm, EVo2 or EVo2 compatible
Cable Length(Including Connector)	300mm or as customer's requirements
Maximum Static Test Load	5400 Pa (front) / 2400 Pa (rear)

Packing Details	
Dimension	1762×1134×30mm
Weight	24.2kg
Pallet Dimensions	1790×1130×1259mm
Packaging(Per pallet)	37pcs
Packaging	414 pcs/20'GP, 936 pcs/40'HC

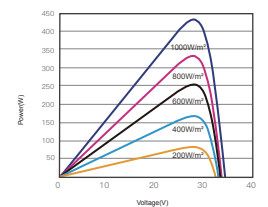
## ENGINEERING DRAWINGS



## IV CURVES



I-V CURVES OF PV MODULE(435W)



P-V CURVES OF PV MODULE(435W)