



# 430~455W

## M10 solar panels Aquaman series

Mono SMBB TOPCon large size half cut  
full black double glass solar panel

**NEW**

Products can match different installation conditions, taking into account high adaptability and high compatibility. With mature support and inverter scheme, customized design for industrial and commercial and distributed scenarios.

### MODULE CHARACTER



Exceptional PID Resistance



Salt mist resistance/Ammonia resistance  
/dust and hail resistance



Production process reliability test



0~+5W Positive Tolerance



Lower LID / LETID



Reduce BOS cost increase ROI



Non-destructive cutting

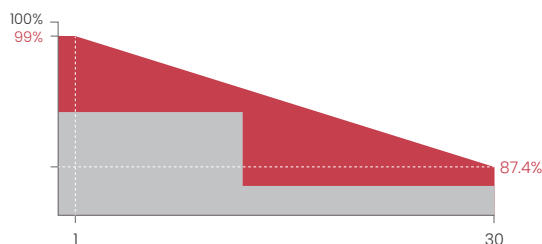
### CERTIFICATION

IEC61215/IEC61730

ISO9001:Quality Management System

ISO14001:Environmental Management System

ISO45001:Occupational Health and Safety Management System



Linear performance warranty



Product warranty



# SR-54MNHLPProD 430w-455w Aquaman series



| Module Type                                   | SR-54M 430NHLProD |        | SR-54M 435NHLProD |        | SR-54M 440NHLProD |        | SR-54M 445NHLProD |        | SR-54M 450NHLProD |        | SR-54M 455NHLProD |        |
|-----------------------------------------------|-------------------|--------|-------------------|--------|-------------------|--------|-------------------|--------|-------------------|--------|-------------------|--------|
| Module Efficiency (%)                         | 21.54             |        | 21.79             |        | 22.05             |        | 22.30             |        | 22.55             |        | 22.8              |        |
| Tolerance (W)                                 | 0~+5              |        | 0~+5              |        | 0~+5              |        | 0~+5              |        | 0~+5              |        | 0~+5              |        |
| Test Environment                              | STC               | NOCT   | STC               | NOCT   | STC               | NOCT   | STC               | NOCT   | STC               | NOCT   | STC               | NOCT   |
| Maximum Power Pmax(W)                         | 430               | 324.39 | 435               | 328.16 | 440               | 331.93 | 445               | 335.70 | 450               | 339.48 | 455               | 343.25 |
| Open Circuit Voltage Voc(V)                   | 38.56             | 36.83  | 38.79             | 37.05  | 39.02             | 37.27  | 39.25             | 37.49  | 39.48             | 37.71  | 39.71             | 37.93  |
| Short Circuit Current Isc(A)                  | 14.26             | 11.51  | 14.34             | 11.58  | 14.42             | 11.64  | 14.50             | 11.71  | 14.58             | 11.77  | 14.65             | 11.83  |
| Maximum Power Voltage Vm(V)                   | 31.86             | 29.90  | 32.05             | 30.07  | 32.24             | 30.25  | 32.43             | 30.43  | 32.62             | 30.61  | 32.81             | 30.79  |
| Maximum Power Current Im(A)                   | 13.50             | 10.89  | 13.58             | 10.95  | 13.65             | 11.01  | 13.73             | 11.07  | 13.80             | 11.13  | 13.87             | 11.18  |
| Cell Type (mm)                                | M10 TOPCon        |        |                   |        |                   |        |                   |        |                   |        |                   |        |
| Number of Cells (Pcs)                         | 108(6×18)         |        |                   |        |                   |        |                   |        |                   |        |                   |        |
| Maximum System Voltage (V)                    | DC1500            |        |                   |        |                   |        |                   |        |                   |        |                   |        |
| Temp.Coeff.of Voc (%/°C)                      | -0.25             |        |                   |        |                   |        |                   |        |                   |        |                   |        |
| Temp.Coeff.of Isc (%/°C)                      | 0.045             |        |                   |        |                   |        |                   |        |                   |        |                   |        |
| Temp.Coeff.of Pm (%/°C)                       | -0.29             |        |                   |        |                   |        |                   |        |                   |        |                   |        |
| Operating Temperature (°C)                    | -40 to 85         |        |                   |        |                   |        |                   |        |                   |        |                   |        |
| Nominal Operating Cell Temperature(NOCT) (°C) | 45±2              |        |                   |        |                   |        |                   |        |                   |        |                   |        |
| Max.Series Fuse (A)                           | 30                |        |                   |        |                   |        |                   |        |                   |        |                   |        |
| Pressure Bearing (Pa)                         | 5400              |        |                   |        |                   |        |                   |        |                   |        |                   |        |
| Wind Bearing (Pa)                             | 2400              |        |                   |        |                   |        |                   |        |                   |        |                   |        |

STC: Irradiance 1000W/m<sup>2</sup>, Cell temperature 25°C, AM1.5

NOCT: Irradiance 800W/m<sup>2</sup>, Ambient temperature 20°C, Wind speed 1m/s

| Different backside power gains(450W) | 10%   | 15%   | 20%   | 25%   |
|--------------------------------------|-------|-------|-------|-------|
| Peak Power Pmax(W)                   | 495   | 517.5 | 540   | 562.5 |
| Open Circuit Voltage Voc(V)          | 39.49 | 39.51 | 39.52 | 39.53 |
| Short Circuit Current Isc(A)         | 16.02 | 16.75 | 17.47 | 18.19 |
| Maximum Power Voltage Vm(V)          | 32.63 | 32.64 | 32.65 | 32.66 |
| Maximum Power Current Im(A)          | 15.17 | 15.85 | 16.54 | 17.22 |

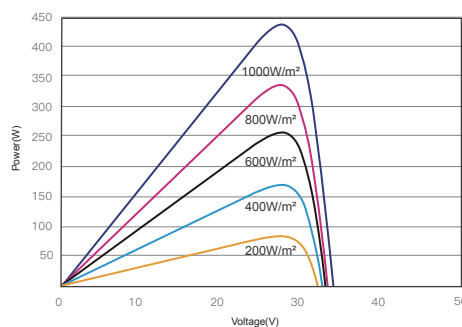
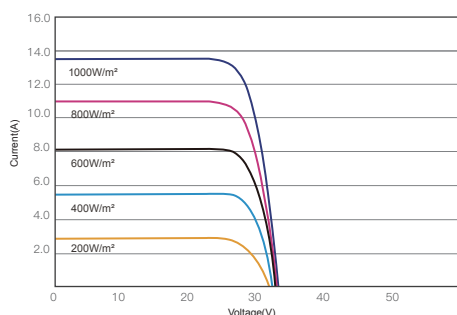
## MATERIAL DETAILS

|       |                                                         |                     |                                            |
|-------|---------------------------------------------------------|---------------------|--------------------------------------------|
| Frame | Anodized aluminum                                       | Cable&Connector     | 4mm <sup>2</sup> , EVO2 or EVO2 compatible |
| Cell  | 6×18pcs mono solar cell                                 | Junction Box        | Ip≥68, TÜV&UL                              |
| Glass | 2×2.0mm Anti-Reflection Coating Heat Strengthened Glass | Net length of Cable | 350mm or as customer's requirements        |

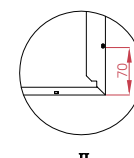
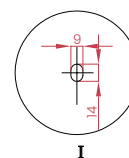
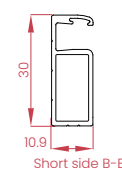
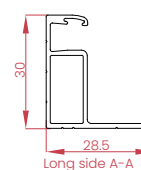
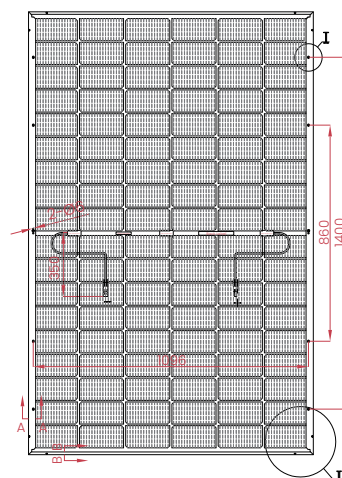
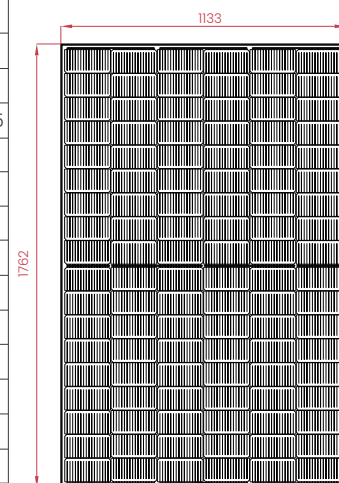
## PACKING DETAILS

|                  |                |         |              |
|------------------|----------------|---------|--------------|
| Dimension        | 1762×1133×30mm | Weight  | 24.2kg       |
| Loading Capacity | 962pcs/40'HC   | Packing | 37pcs/pallet |

## IV CURVES



## ENGINEERING DRAWINGS



Length: ±2mm  
Width: ±2mm  
Thickness: ±1mm  
Pitch-row: ±2mm