

# Hima Series

Mono-Crystalline  
**440~460W**

**0~+5W POWER TOLERANCE**

- High efficiency N - type Double glass Hima Module
- Stronger properties, PID resistance, reduced hot spot loss
- Front Load Capacity 10000 Pa; Back Load Capacity 8500 Pa
- Through Hail Testing: 45mm Diameter, Impact Speed 30.7m/s
- 400 thermal cycles from 85°C to -40°C
- Bifacial module, more power generation

15 years material warranty

**15**

30 years power linear warranty

**30**

**108**

HALF-CUT  
CELLS



**22.6%**  
MAXIMUM CONVERSION

**0~+5W**  
POWER TOLERANCE

**0.4%**  
0.4% PER YEAR OVER 30 YEARS

**Half-Cut Module**  
LOWER TEMPERATURE COEFFICIENT

## Specification

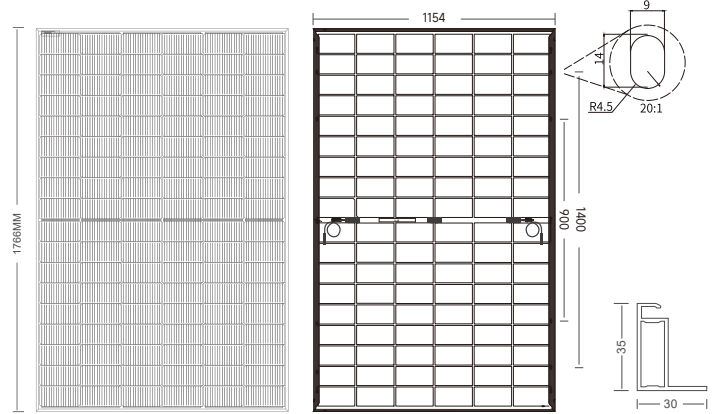
|              |                                 |
|--------------|---------------------------------|
| Cell Type    | Mono Crystalline 16BB           |
| No. of Cells | 108 [2x(6×9)] pcs               |
| Dimension    | 1766x1154x35mm                  |
| Weight       | 34kg±3%                         |
| Front Glass  | 2.8mm                           |
| Back Glass   | 2.8mm                           |
| Frame        | Black Anodized Aluminum Alloy   |
| Junction Box | IP68                            |
| Cable Length | 300mm,1200mm(can be customized) |

## Packing Standard

31pcs/pallet

40HQ: 22 pallets/container, 682pcs/container

## Mechanical Diagrams



Length: ±2mm Width: ±2mm Thickness: ±1mm Hole pitch: ±2mm

## Electrical Parameters

| Module Type                   | QN-440HTA-06 |       | QN-445HTA-06 |       | QN-450HTA-06 |       | QN-455HTA-06 |       | QN-460HTA-06 |       |
|-------------------------------|--------------|-------|--------------|-------|--------------|-------|--------------|-------|--------------|-------|
|                               | STC          | NOCT  | STC          | NOCT  | STC          | NOCT  | STC          | NOCT  | STC          | NOCT  |
| Peak Power-Pmax (W)           | 440          | 333   | 445          | 336   | 445          | 340   | 455          | 344   | 460          | 348   |
| Open Circuit Voltage-Voc (V)  | 39.42        | 37.45 | 39.70        | 37.72 | 39.98        | 37.98 | 40.08        | 38.08 | 40.37        | 38.35 |
| Short Circuit Current-Isc (A) | 14.13        | 11.30 | 14.19        | 11.35 | 14.25        | 11.40 | 14.30        | 11.44 | 14.36        | 11.49 |
| Maximum Power Voltage-Vmp(V)  | 32.74        | 30.94 | 32.99        | 31.18 | 33.23        | 31.40 | 33.48        | 31.64 | 33.72        | 31.87 |
| Maximum Power Current-mp(A)   | 13.44        | 10.75 | 13.49        | 10.79 | 13.54        | 10.83 | 13.59        | 10.87 | 13.64        | 10.91 |
| Module Efficiency - nm(%)     | 21.6         |       | 21.8         |       | 22.1         |       | 22.3         |       | 22.6         |       |

## Electrical Parameters At BNPI

|                                  |       |       |       |       |       |
|----------------------------------|-------|-------|-------|-------|-------|
| Maximum Power-Pmax(W)            | 485   | 491   | 496   | 502   | 507   |
| Open Circuit Voltage-Voc (V)     | 39.42 | 39.70 | 39.98 | 40.08 | 40.37 |
| Short Circuit Current-Isc135 (A) | 15.58 | 15.64 | 15.71 | 15.77 | 15.84 |
| Maximum Power Voltage-Vmp (V)    | 17.35 | 17.42 | 17.49 | 17.57 | 17.64 |
| Maximum Power Current-Imp (A)    | 32.74 | 32.99 | 33.23 | 33.48 | 33.72 |
| Short Circuit Current-Isc300 (A) | 14.82 | 14.87 | 14.93 | 14.98 | 15.04 |

## Operating Parameters

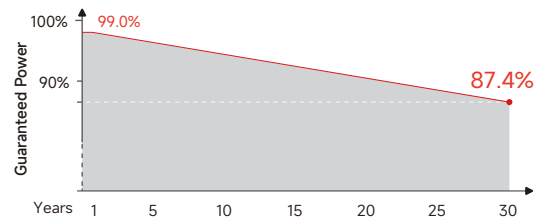
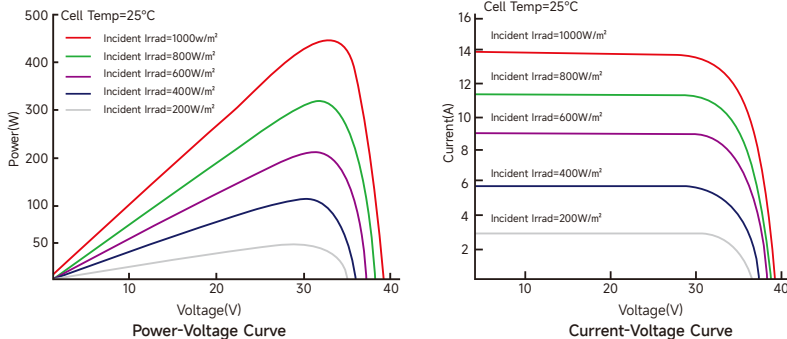
|                                    |             |
|------------------------------------|-------------|
| Maximum System Voltage             | 1500V DC    |
| Maximum Series Fuse Rating         | 30A         |
| Nominal Operating Cell Temperature | 43±2°C      |
| Operational Temperature            | -45°C~+85°C |
| Safety Class                       | Class I     |
| Refer.Bifacial Factor              | 80%+10%     |

## Temperature Coefficient (STC Test)

|                                 |           |
|---------------------------------|-----------|
| Temperature Coefficient of Isc  | +0.04%/°C |
| Temperature Coefficient of Voc  | -0.26%/°C |
| Temperature Coefficient of Pmax | -0.30%/°C |

## Load Capacity

|                      |                                     |
|----------------------|-------------------------------------|
| Max Load Front       | 10000Pa                             |
| Max Load Back        | 8500Pa                              |
| Through Hail Testing | 45mm Diameter, Impact Speed 30.7m/s |



**STC**: Irradiance:1000W/m<sup>2</sup> | Battery temperature: 25°C | Atmospheric=1.5  
**NOCT**: Irradiance:800W/m<sup>2</sup> | Ambien temperature: 20°C | Atmospheric=1.5 | Wind speed 1m/s  
**BNPI**: Rear Irradiance 135W/m<sup>2</sup> | Bifaciality coefficient 80%±5%

D5 Greenland Window Building  
 Nonghua Road  
 Yuhuatai District, Nanjing, China  
[www.q-sunsolar.com](http://www.q-sunsolar.com)

