

# 640W

## N-TYPE HALF CELL MONO

### BIFACIAL DOUBLE GLASS

GERMAN BRAND SOLAR PANEL

### 625W-640W

#### POWER OUTPUT RANGE

### 132 CELL

#### MBB MONO N-TYPE

### 23.69%

#### MAXIMUM EFFICIENCY

### 0 to +5W

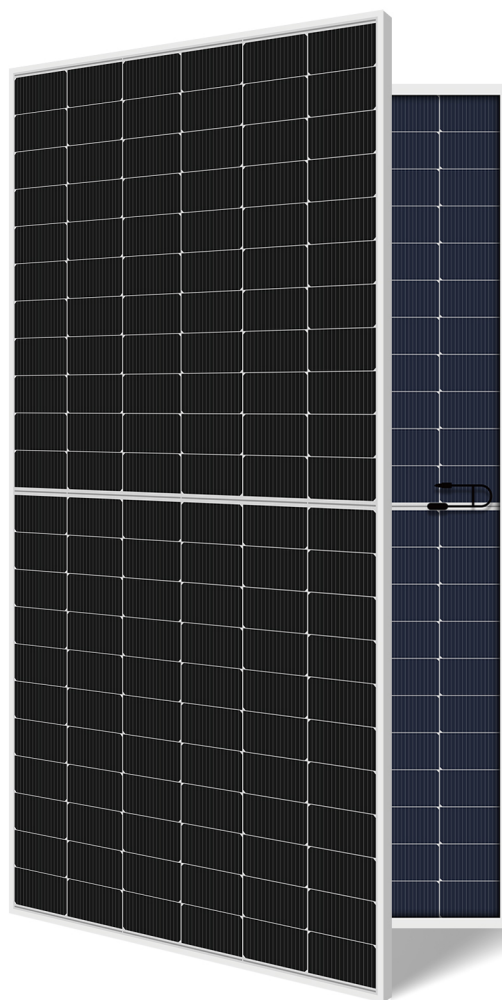
#### POSITIVE POWER TOLERANCE



Product  
Warranty



Output  
Warranty



Higher Efficiency



Lower LID



German Technology



Sand Resistant



Environmentally Friendly



Stable Performance



#### Higher Output of Power

Effectively reduce the unit cost of PV solar system by watt



#### Optimize the temperature coefficient

Improve the performance under the condition of shadow and low temperature coefficient



#### Reduce the shadow loss on the power output

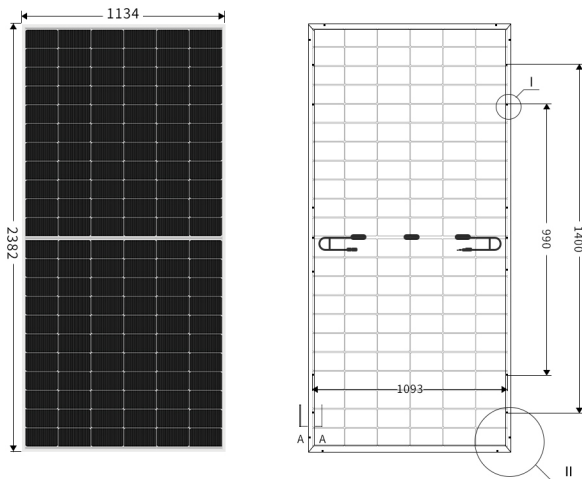
Effectively reduce the risk of heat spot on high efficiency



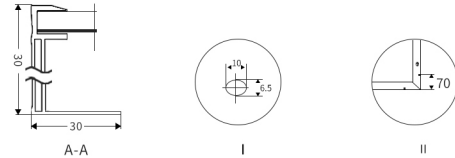
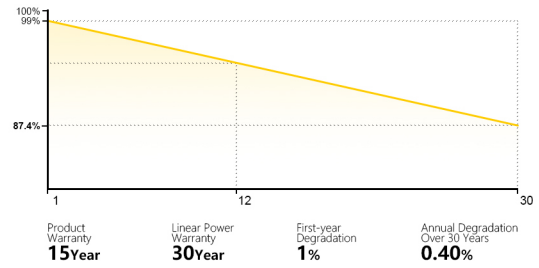
#### Stronger the physical property

Optimize the property of power generating and reliability of the system

## DIMENSIONS OF PV MODULE



## LINEAR PERFORMANCE WARRANTY



## MECHANICAL DATA

|                   |                                                 |
|-------------------|-------------------------------------------------|
| Solar Cells       | Mono N-TYPE                                     |
| Cell Orientation  | 132 (6 x 22)                                    |
| Module Dimensions | 2382 x 1134 x 30mm                              |
| Weight            | 32.5kg                                          |
| Front Glass       | 2.0mm                                           |
| Back Glass        | 2.0mm                                           |
| Frame             | Anodized Aluminium Alloy                        |
| J-Box             | IP 68 Rated                                     |
| Cables            | 4.0mm <sup>2</sup> , 350mm or Customized Length |
| Connector         | MC4 Compatible                                  |

**PACKAGE** Modules per Pallet:37 pieces Modules per 40'HQ Container:740 pieces

## TEMPERATURE RATINGS

|                                             |           |
|---------------------------------------------|-----------|
| Nominal Operating Cell Temperature(NOCT)    | 41±3°C    |
| Temperature Coefficient of P <sub>MAX</sub> | -0.29%/°C |
| Temperature Coefficient of Voc              | -0.25%/°C |
| Temperature Coefficient of Isc              | +0.05%/°C |

## MAXIMUM RATINGS

|                         |                |
|-------------------------|----------------|
| Operational Temperature | -40°C to +85°C |
| Maximum System Voltage  | 1500V DC       |
| Max Series Fuse Rating  | 35A            |
| Mechanical Load         | 5400pa         |
| Wind Load               | 2400pa         |

## MODULE TYPE

|                       |                      | HTS-132210RH625LDG |       | HTS-132210RH630LDG |       | HTS-132210RH635LDG |       | HTS-132210RH640LDG |       |
|-----------------------|----------------------|--------------------|-------|--------------------|-------|--------------------|-------|--------------------|-------|
|                       |                      | STC                | NOCT  | STC                | NOCT  | STC                | NOCT  | STC                | NOCT  |
| Maximum Power         | P <sub>MAX</sub> (W) | 625                | 473   | 630                | 476   | 635                | 480   | 640                | 483   |
| Maximum Power Voltage | V <sub>MPP</sub> (V) | 41.40              | 39.10 | 41.60              | 39.30 | 41.80              | 39.50 | 42.00              | 39.70 |
| Maximum Power Current | I <sub>MPP</sub> (A) | 15.11              | 12.08 | 15.16              | 12.11 | 15.20              | 12.14 | 15.25              | 12.17 |
| Open Circuit Voltage  | V <sub>OC</sub> (V)  | 48.60              | 46.00 | 48.80              | 46.20 | 49.00              | 46.40 | 49.20              | 46.60 |
| Short Circuit Current | I <sub>SC</sub> (A)  | 16.14              | 13.02 | 16.20              | 13.06 | 16.26              | 13.10 | 16.32              | 13.14 |
| Tolerance             | (W)                  | 0 ± 5              |       | 0 ± 5              |       | 0 ± 5              |       | 0 ± 5              |       |
| Module Efficiency     | (%)                  | 23.14              |       | 23.32              |       | 23.51              |       | 23.69              |       |

STC: Irradiance 1000 W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5 according to EN 60904-3.  
Average efficiency reduction of 4.5% at 200W/m<sup>2</sup> according to EN 60904-1  
NOCT: Irradiance at 800 W/m<sup>2</sup>, Ambient Temperature 20°C, Wind Speed 1m/s.

## BIFACIAL OUTPUT-REAR SIDE POWER GAIN 10% FOR REFERENCE

| Module Type          | HTS-132210RH625LDG | HTS-132210RH630LDG | HTS-132210RH635LDG | HTS-132210RH640LDG |
|----------------------|--------------------|--------------------|--------------------|--------------------|
| P <sub>max</sub> (W) | 687.5              | 693                | 698.5              | 704                |
| V <sub>oc</sub> (V)  | 48.6               | 48.8               | 49                 | 49.2               |
| I <sub>sc</sub> (A)  | 17.54              | 17.60              | 17.65              | 17.71              |
| V <sub>mp</sub> (V)  | 41.4               | 41.6               | 41.8               | 42                 |
| I <sub>mp</sub> (A)  | 16.61              | 16.66              | 16.71              | 16.76              |