



# TS-M10/144H

Monofacial Module

560W-580W



**580W**

Maximum Power Output

**22.45%**

Maximum Module Efficiency

**0~+3%**

Power Output Guarantee

## N-Type



16BB(182mm)

### ● FIRE CLASS A

Maximum fire protection through double glazing according to the highest safety requirements

### ● REINSURANCE COVERAGE

Taoistic is reinsured for 25 years of performance guarantee



High quality silicon wafers guarantee high power module output and excellent cost-effectiveness, making it an ideal choice for large power plants



Selected packaging materials and strict process plans to ensure component PID resistance



Lower oxygen and carbon content leads to lower LID



Adapt to harsh outdoor environments through weather resistance tests such as sand and dust, salt spray, and ammonia gas



The design of series and parallel connection reduces the series resistance  $r_s$  of components, reduces internal electrical performance losses, and improves the power generation capacity of the system end



Our company has concluded a reinsurance agreement with Ariel Re - Lloyd's syndicate 1910. Please see <http://verification.arielre-cleanenergy.com>

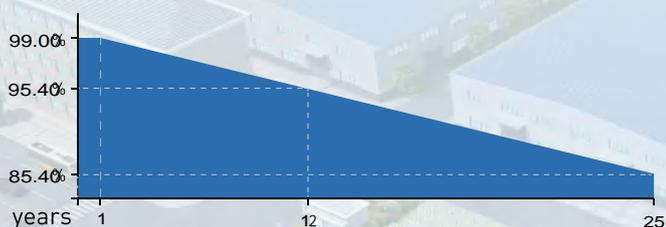
## Deliver Reliable Performance Over Time

- manufacturer of crystalline silicon photovoltaic modules
- Fully automatic facility and world-class technology
- Rigorous quality control to meet the highest standard: ISO9001:2015, ISO14001: 2015 and ISO45001:2008
- Tested for harsh environments (salt mist, ammonia corrosion and sand blowing test: IEC 61701, IEC 62716)
- Long term reliability tests
- 2x100% EL inspection ensuring defect-free modules
- Fire class1 certificate for ITALY

## WARRANTY

- 12 years product warranty
- 25 years performance warranty

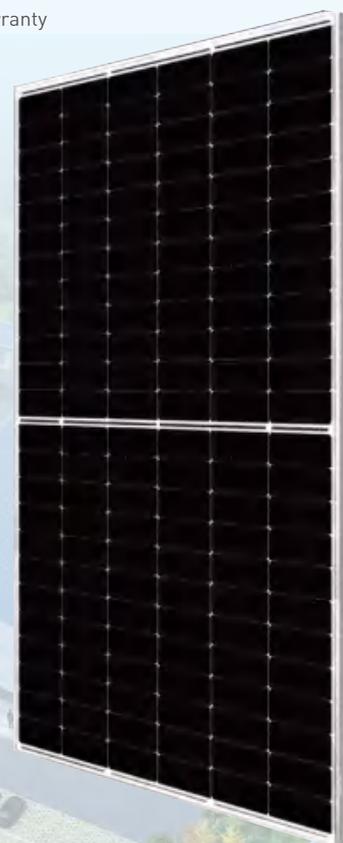
## Linear Performance Warranty



12 Years Product Warranty 25 Years Linear Power Warranty

\* Please refer to standard warranty for details

## Product Certification



# TS-M10/144H

## Monocrystalline Module

### 560W-580W

#### Electrical Specification{ STC\*}

|                        | Pmax{ W} | 560   | 565   | 570      | 575   | 580   |
|------------------------|----------|-------|-------|----------|-------|-------|
| Maximum Power          | Pmax{ W} | 560   | 565   | 570      | 575   | 580   |
| Maximum Power Voltage  | Vmp{ V}  | 41.95 | 42.14 | 42.29    | 42.44 | 42.59 |
| Maximum Power Current  | Imp{ A}  | 13.35 | 13.41 | 13.48    | 13.55 | 13.62 |
| Open Circuit Voltage   | Voc{ V}  | 50.67 | 50.87 | 51.07    | 51.27 | 51.47 |
| Short Circuit Current  | Isc{ A}  | 14.13 | 14.19 | 14.25    | 14.31 | 14.37 |
| Module Efficiency      | { %}     | 21.67 | 21.87 | 22.07    | 22.26 | 22.45 |
| Power Output Tolerance | { W}     |       |       | 0 - + 3% |       |       |

\* Irradiance 1000W/m<sup>2</sup>, Module Temperature 25°C, Air Mass 1.5

#### Electrical Specification{ NOCT\*}

|                       | Pmax{ W} | 425   | 429   | 432   | 436   | 440   |
|-----------------------|----------|-------|-------|-------|-------|-------|
| Maximum Power         | Pmax{ W} | 425   | 429   | 432   | 436   | 440   |
| Maximum Power Voltage | Vmp{ V}  | 39.38 | 39.51 | 39.60 | 39.69 | 39.81 |
| Maximum Power Current | Imp{ A}  | 10.79 | 10.85 | 10.92 | 10.99 | 11.05 |
| Open Circuit Voltage  | Voc{ V}  | 48.06 | 48.20 | 48.33 | 48.46 | 48.60 |
| Short Circuit Current | Isc{ A}  | 11.49 | 11.55 | 11.62 | 11.68 | 11.75 |

\* Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20°C, Wind Speed 1m/s

#### Mechanical Data

|                                 |                                       |
|---------------------------------|---------------------------------------|
| Number of Cells                 | 144 pieces [6 × 24]                   |
| Dimensions of Module L*W*H{ mm} | 2278 × 1134 × 30/35mm                 |
| Weight{ kg}                     | Approx 28.7/29.0 kg                   |
| Front Side Glass                | 3.2mm , Anti-reflection coating glass |
| Backsheet                       | White                                 |
| Frame                           | Anodized aluminium                    |
| J-Box                           | IP68                                  |
| Cable                           | 4.0mm <sup>2</sup> , 300mm            |
| Number of diodes                | 3                                     |
| Wind/Snow Load                  | 2400 Pa/5400 pa*                      |
| Connector                       | MC4 compatible or MC compatible       |

\* For more details please check the installation manual

#### Temperature Ratings

|   |           |
|---|-----------|
| Nominal Operating Cell Temperature{ NOCT }  | 44 ± 2    |
| Temperature Coefficient of Isc              | +0.046%/  |
| Temperature Coefficient of Voc              | - 0.250%/ |
| Temperature Coefficient of P <sub>MAX</sub> | - 0.300%/ |

#### Temperature Ratings

|                         |              |
|-------------------------|--------------|
| Operational Temperature | - 40--+85    |
| Maximum System Voltage  | 1500V DC-[H] |
| Max Series Fuse Rating  | 25A          |

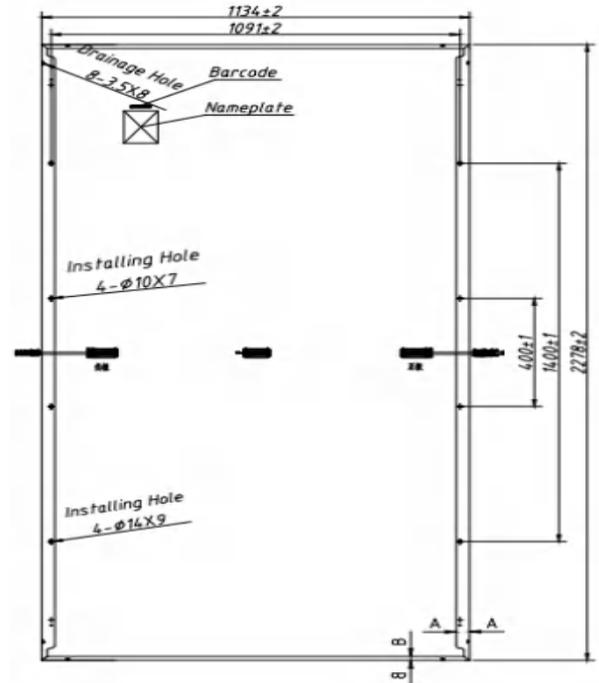
#### Packaging Configuration

|                         |                |
|-------------------------|----------------|
| Module per box          | 36/31 pieces   |
| Module per 40 container | 720/620 pieces |

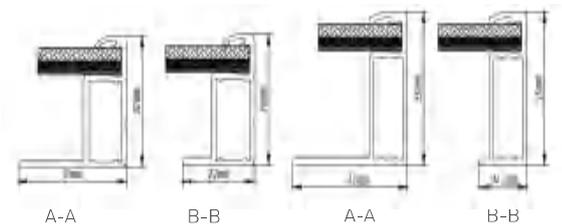
#### Optional

|              |             |
|--------------|-------------|
| Connector    | Original MC |
| Cable length | 1200mm      |
| Frame        | Black       |
| Backsheet    | Black       |

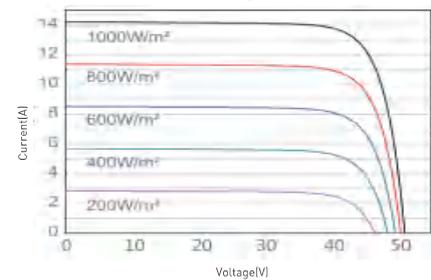
#### Module Dimension



Back View



I-V Curve at Different Temperature (570W)



I-V/P-V Curve at Different Irradiation (570W)

