



# TS-M12/120G

## Monocrystalline Module

### 615W-635W

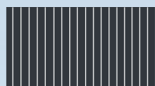


**635W**  
Maximum Power Output

**22.60%**  
Maximum Module Efficiency

**0~+3%**  
Power Output Guarantee

### N-Type



18BB(210mm)

- **FIRE CLASS A**  
Maximum fire protection through double glazing according to the highest safety requirements
- **REINSURANCE COVERAGE**  
Taoistic is reinsured for 30 years of performance guarantee

<p>High quality silicon wafers guarantee high power module output and excellent cost-effectiveness, making it an ideal choice for large power plants</p>	<p>Selected packaging materials and strict process plans to ensure component PID resistance</p>	<p>Lower oxygen and carbon content leads to lower LID</p>
<p>Adapt to harsh outdoor environments through weather resistance tests such as sand and dust, salt spray, and ammonia gas</p>	<p>The design of series and parallel connection reduces the series resistance <math>R_s</math> of components, reduces internal electrical performance losses, and improves the power generation capacity of the system end</p>	<p>Our company has concluded a reinsurance agreement with Ariel Re - Lloyd's syndicate 1910. Please see <a href="http://verification.arielre-cleanenergy.com">http://verification.arielre-cleanenergy.com</a></p>

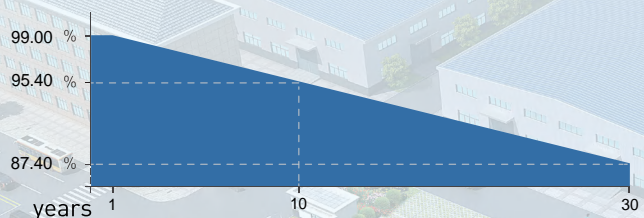
### Deliver Reliable Performance Over Time

- 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
- 30 years performance warranty

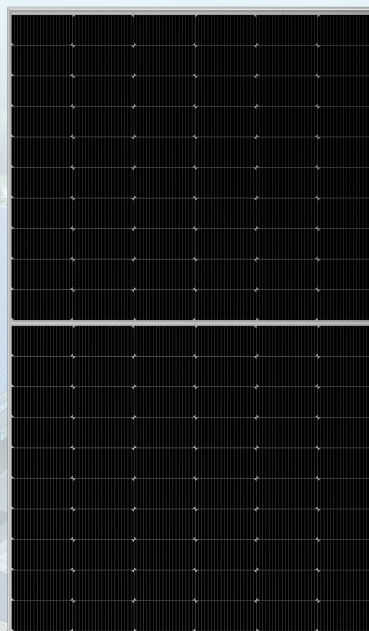
### Linear Performance Warranty



12 Years Product Warranty 30 Years Linear Power Warranty

\* Please refer to standard warranty for details

### Product Certification



# TS-M12/120G

## Monocrystalline Module

### 615W-635W

#### Electrical Specification [ STC\* ]

Maximum Power	Pmax[W]	615	620	625	630	635
Maximum Power Voltage	Vmp[V]	35.50	35.70	35.90	36.10	36.30
Maximum Power Current	Imp[A]	17.33	17.37	17.41	17.46	17.50
Open Circuit Voltage	Voc[V]	42.70	42.90	43.10	43.30	43.50
Short Circuit Current	Isc[A]	18.26	18.31	18.36	18.41	18.46
Module Efficiency	[%]	21.80	22.00	22.20	22.40	22.60
Power Output Tolerance	[W]			0~+3%		

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

#### Electrical Specification [ NOCT\* ]

Maximum Power	Pmax[W]	465	469	473	476	480
Maximum Power Voltage	Vmp[V]	33.6	33.8	33.9	34.1	34.3
Maximum Power Current	Imp[A]	13.86	13.89	13.93	13.96	13.99
Open Circuit Voltage	Voc[V]	40.4	40.6	40.8	41.0	41.2
Short Circuit Current	Isc[A]	14.72	14.77	14.81	14.85	14.89

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

#### Mechanical Data

Number of Cells	120pieces [6 × 20]
Dimensions of Module L*W*H [ mm ]	2172 × 1303 × 35mm
Weight [ kg ]	Approx 35.3 kg
Front Side Glass	2.0 , Anti-reflection coating glass
Back Side Glass	2.0 , Hightransparency solar glass
Frame	Anodized aluminium
J-Box	Protection level 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	35A

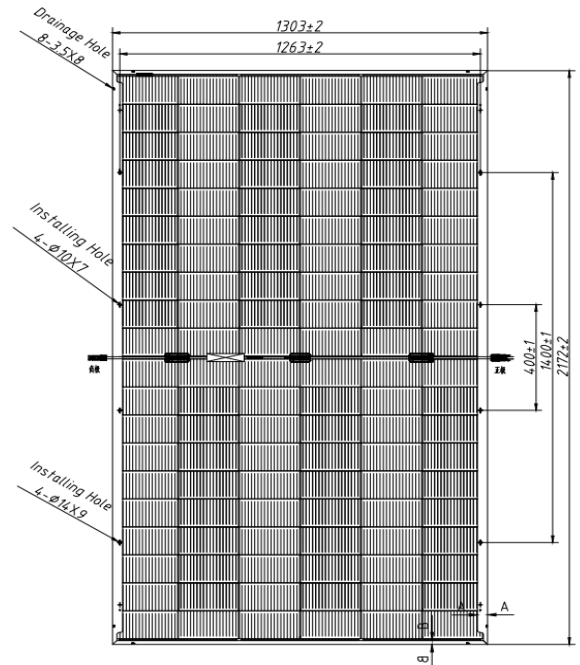
#### Packaging Configuration

Module per box	31 pieces
Module per 17.5 flatcar	868pieces
Module per 40 container	558 pieces

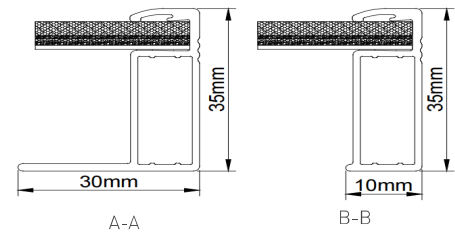
#### Optional

Connector	Original MC
Cable length	1200mm
Frame	Black
Glass	Black

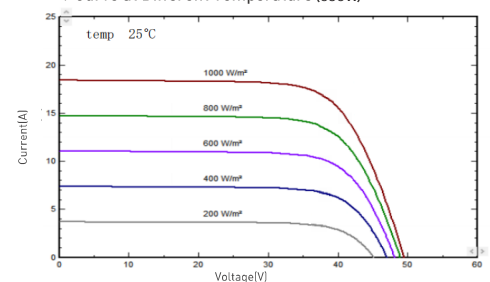
#### Module Dimension



#### Back View



#### I-V Curve at Different Temperature (630W)



#### I-V/P-V Curve at Different Irradiance (630W)

