

## n-type

TECHNOLOGY  
INSIDE

# 580 W 22.4 %

Maximum power

Maximum efficiency

## KEY BENEFITS AND FEATURES



Power from **570 to 580 Watt**



144 M10 **n-type** half-cut cells



The **new standard** in photovoltaic technology



**High efficiency** and enhanced low light performance



Excellent temperature coefficient **-0.29%/°C**



2278 x 1134 x 35 mm

### Performance guarantee

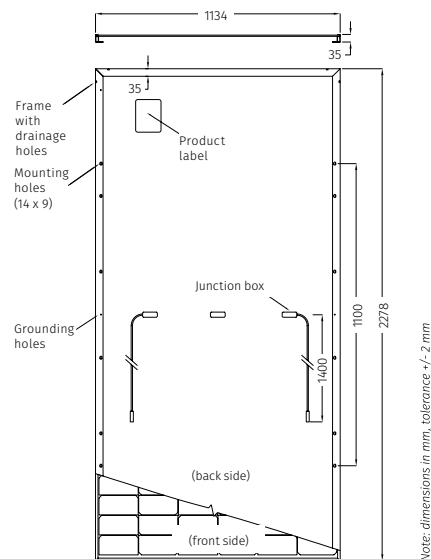
- **25-years** performance warranty with max power decrease from 2<sup>nd</sup> year **0.4%/year**
- **99%** at the end of first year
- **92%** at the end of 20<sup>th</sup> year
- **89%** at the end of 25<sup>th</sup> year

### Product guarantees

- **15-year** product warranty
- Third-party product **liability** insurance
- All FuturaSun's modules are designed and guaranteed by the **Italian** headquarters

## Mechanical Specifications

|   |   |
|---|---|
| Dimensions                                | 2278 x 1134 x 35 mm   |
| Weight                                    | 28.2 kg   |
| Glass                                     | High transmission, Low iron, Tempered, ARC, Thickness 3.2 mm                                    |
| Cells                                     | 144 monocrystalline half-cut MBB n-type cells 182 x 91 mm                                       |
| Frame                                     | Anodized aluminium frame with mounting and drainage holes                                       |
| Junction boxes                            | Certified according to IEC 62790, IP 68 approved, 3 bypass diodes                               |
| Cables                                    | Solar cable, length 1100 mm or customized assembled with 4mm <sup>2</sup> compatible connectors |
| Backsheet                                 | Composite Multilayer film - white   |
| Maximum reverse current (I <sub>r</sub> ) | 25 A  |
| Maximum system voltage                    | 1500 V  |
| Mechanical load (snow)                    | Design load: 3600 Pa, (5400 Pa including safety factor 1.5)                                     |
| Mechanical load (wind)                    | Design load: 1600 Pa, (2400 Pa including safety factor 1.5)                                     |



## Electrical data - STC\*

|   |   | FU 570 MV | FU 575 MV | FU 580 MV |
|---|---|-----------|-----------|-----------|
| Sorting tolerance                         | W |           | 0/+5      |           |
| Module power (P <sub>max</sub> )          | W | 570       | 575       | 580       |
| Open circuit voltage (V <sub>oc</sub> )   | V | 50.72     | 50.86     | 51.00     |
| Short circuit current (I <sub>sc</sub> )  | A | 14.32     | 14.40     | 14.48     |
| Maximum power voltage (V <sub>mpp</sub> ) | V | 42.05     | 42.20     | 42.35     |
| Maximum power current (I <sub>mpp</sub> ) | A | 13.56     | 13.63     | 13.70     |
| Module efficiency                         | % | 22.00     | 22.20     | 22.40     |

## Electrical data - NOCT\*\*

|   |   | FU 570 MV | FU 575 MV | FU 580 MV |
|---|---|-----------|-----------|-----------|
| Module power (P <sub>max</sub> )          | W | 429       | 433       | 436       |
| Open circuit voltage (V <sub>oc</sub> )   | V | 48.19     | 48.31     | 48.45     |
| Short circuit current (I <sub>sc</sub> )  | A | 11.56     | 11.63     | 11.69     |
| Maximum power voltage (V <sub>mpp</sub> ) | V | 39.5      | 39.59     | 39.68     |
| Maximum power current (I <sub>mpp</sub> ) | A | 10.86     | 10.93     | 11.00     |

## Temperature ratings

|  |      |                 |
|--|------|-----------------|
| Temperature coefficient I <sub>sc</sub>  | %/°C | 0.045           |
| Temperature coefficient V <sub>oc</sub>  | %/°C | -0.25           |
| Temperature coefficient P <sub>max</sub> | %/°C | -0.29           |
| NOCT**                                   | °C   | 45 ± 2          |
| Operating temperature                    | °C   | from -40 to +85 |

## Certifications

|         |  |
|---------|--|
| Factory | ISO 9001 - 14001 - 45001                               |
| Product | IEC EN 61730, IEC EN 61215, IEC EN 61730, Fire Class C |

## Packaging

|                   |                      |
|-------------------|----------------------|
| Quantity / Pallet | 31 pcs               |
| Container 40' HC  | 620 pcs / 20 pallets |

The information included in this module datasheet is subject to change without notice and is provided for informational purposes only. No contractual rights are established or should be inferred because of user's reliance on the information contained in this module datasheet. Please refer to the appropriate module user guide and module product specification document for more detailed technical information regarding module performance, installation and use.

\*Standard Test Conditions STC: 1000 W/m<sup>2</sup> - AM 1.5 - 25 °C - tolerance: P<sub>max</sub> (±3%), V<sub>oc</sub> (±4%), I<sub>sc</sub> (±5%)  
 \*\*Nominal Operating Cell Temperature NOCT: 800 W/m<sup>2</sup> - T=45 °C - AM 1.5

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