

Polycrystalline



POLYCRYSTALLINE | TECHNOLOGY INSIDE

280 W 17.14 %

Maximum power

Maximum efficiency

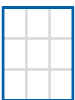
KEY BENEFITS AND FEATURES



Power **280 Watt**



60 M2 **Polycrystalline** cells



Silver frame and white backsheet



Revamping series - Specifically designed for replacement of old photovoltaic modules



Module current approx. **9 Ampere** to fit with old 6 inch solar cells



1650 x 990 x 35 mm

Performance guarantee

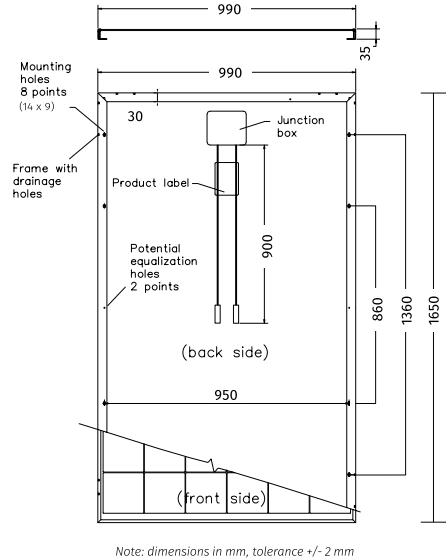
- **25-years** performance warranty with max power decrease from 2nd year **0.5%/year**
- **97%** at the end of first year
- **90%** at the end of 20th year
- **87%** at the end of 25th year

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	1650 x 990 x 35 mm
Weight	17.7 kg
Glass	High transmission, Low iron, Tempered, ARC, Thickness 3.2 mm
Cells	60 polycrystalline cells 156.75 x 156.75 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 900 mm or customized assembled with 4mm² compatible connectors
Backsheet	Composite Multilayer film - white
Maximum reverse current (Ir)	20 A
Maximum system voltage	1000 V (1500 V on request)
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 280 P

Sorting tolerance	W	0/+5
Module power (Pmax)	W	280
Open circuit voltage (Voc)	V	39.00
Short circuit current (Isc)	A	9.21
Maximum power voltage (Vmpp)	V	31.80
Maximum power current (Impp)	A	8.85
Module efficiency	%	17.14

Electrical data - NOCT**

FU 280 P

Module power (Pmax)	W	205
Open circuit voltage (Voc)	V	35.81
Short circuit current (Isc)	A	7.57
Maximum power voltage (Vmpp)	V	28.80
Maximum power current (Impp)	A	7.15

Temperature ratings

Temperature coefficient Isc	%/°C	0.05
Temperature coefficient Voc	%/°C	-0.27
Temperature coefficient Pmax	%/°C	-0.35
NOCT**	°C	45
Operating temperature	°C	from -40 to +85

Certifications

Factory	ISO 9001 - 14001 - 45001
Product	IEC 61730, IEC EN 61215, Fire Class C, IEC EN 61701, IEC EN 62716, Class 1 UNI9177, INMETRO, HW3

Packaging

Quantity / Pallet	31 - 34 pcs
Container 40' HC	910 pcs / 28 pallets

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*Standard Test Conditions STC: 1000 W/m² - AM 1.5 - 25 °C - tolerance: Pmax (±3%), Voc (±4%), Isc (±5%)
**Nominal Operating Cell Temperature NOCT: 800 W/m² - T=45 °C - AM 1.5