

## n-type

TECHNOLOGY  
INSIDE

## 490 W 22.62 %

Maximum power

Maximum efficiency

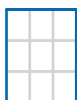
## KEY BENEFITS AND FEATURES



Power from **480 to 490 Watt**



120 **M10 HC MBB n-type** cells



**Silver frame** and white backsheet



**High efficiency** and enhanced  
low light performance



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



1910 x 1134 x 30 mm

### Performance guarantee

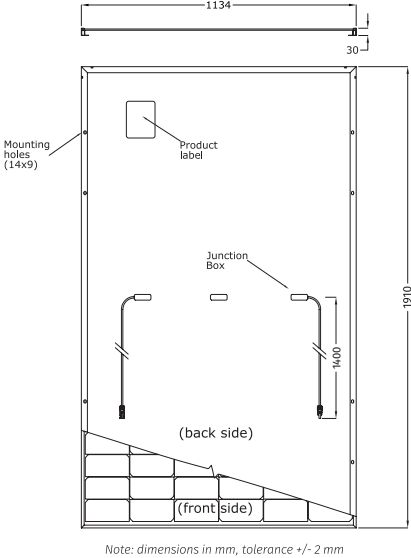
- **25-years** performance warranty with max power decrease from 2<sup>nd</sup> year **0.4%/year**
- **99%** at the end of first year
- **91.4%** at the end of 20<sup>th</sup> year
- **89.4%** at the end of 25<sup>th</sup> year

### 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	1910 x 1134 x 30 mm
Weight	22.4 kg
Glass	High transmission, Low iron, Tempered, ARC, Thickness 3.2 mm
Cells	120 monocrystalline half-cut MBB N-Type cells 182x91 mm
Frame	Anodized aluminum frame with mounting and drainage holes
Junction boxes	Certified according to IEC 62790, IP 68 approved, 3 bypass diodes
Cables	Solar cable 4mm², length 1400 mm or customized, with connectors type Suzhou Xtong PV-XT101.2
Backsheet	Composite Multilayer film
Maximum reverse current (Ir)	25 A
Maximum system voltage	1500 V
Mechanical load (snow)	Design load: +1600 Pa, (+2400 Pa including safety factor 1.5)
Mechanical load (wind)	Design load: -1600 Pa, (-2400 Pa including safety factor 1.5)



Electrical data - STC\*

		FU480MV Silk Nova	FU485MV Silk Nova	FU490MV Silk Nova
Sorting tolerance	W	0~+5		
Module power (Pmax)	W	480	485	490
Open circuit voltage (Voc)	V	42.90	43.18	43.55
Short circuit current (Isc)	A	14.26	14.29	14.32
Maximum power voltage (Vmpp)	V	35.60	35.89	36.16
Maximum power current (Impp)	A	13.48	13.51	13.55
Module efficiency	%	22.16	22.39	22.62

Electrical data - NOCT\*\*

		FU480MV Silk Nova	FU485MV Silk Nova	FU490MV Silk Nova
Module power (Pmax)	W	361.29	364.94	368.61
Open circuit voltage (Voc)	V	40.76	40.88	41.01
Short circuit current (Isc)	A	11.51	11.58	11.64
Maximum power voltage (Vmpp)	V	33.36	33.41	33.47
Maximum power current (Impp)	A	10.83	10.92	11.01

Caratteristiche operative

Temperature coefficient Isc	%/°C	0.045
Temperature coefficient Voc	%/°C	-0.25
Temperature coefficient Pmax	%/°C	-0.29
NOCT**	°C	45 ± 2
Operating temperature	°C	from -40 to +85
Module (T98) max	°C	70

Certifications

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

Packaging

Quantity / Pallet	36 pcs
Container 40' HC	864 pcs / 24 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  
Product Made in P.R.C.  
AUS\_01