



Engineered
in Italy

NEW
5 BUSBAR

FU 290 / 300 M - All Black

Monocrystalline Photovoltaic Module - 60 cells



GENERAL FEATURES

- **Total black look for particular architectural requirements**
- **15-year product warranty**
- **High-efficiency PERC cells** optimized for low irradiance decrease ohmic losses and increase the yield
- **Tempered 3.2 mm safety glass** for optimal mechanical stability and transparency
- **High temperature resistance** (tested at 105° C for 200 hours)
- For installations **up to an altitude of 7000 m**
- Maximum **resistance against hail** (83 km/h)

CERTIFICATIONS

- > **IEC 61215:2016 - IEC 61730:2016 & Factory Inspection**
- > **Fire Resistance - Class 1**
- > **Salt Corrosion Resistance** IEC 61701
- > **Ammonia Corrosion** IEC 62716
- > **Dust and Sand Resistance** IEC 60068-2-68

NEW

GUARANTEES

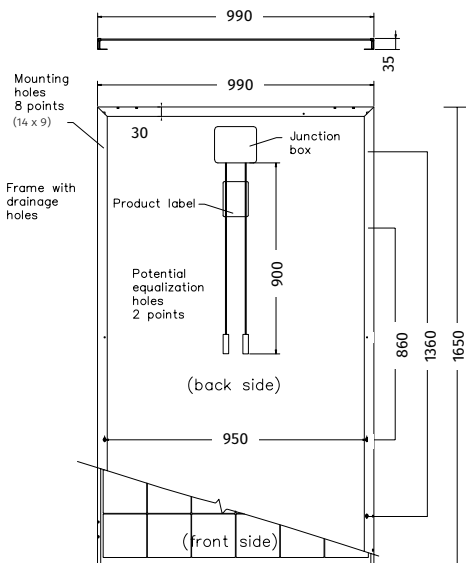
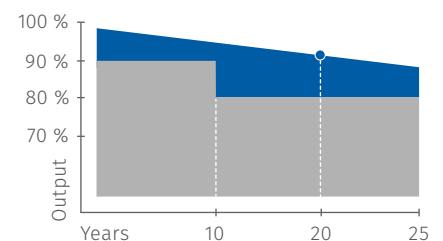
Performance guarantee

Max power decrease **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 guarantee

15 YEARS

■ Market standard performances
■ FuturaSun performances



ELECTRICAL DATA

MODULE		FU 290 M	FU 300 M
<i>Standard Test Conditions STC: 1000 W/sqm - AM 1.5 - 25 °C - tolerance: Pmax (±3%), Voc (±4%), Isc (±5%)</i>			
Module power (Pmax)	W	290	300
Open circuit voltage (Voc)	V	39.48	40.16
Short circuit current (Isc)	A	9.43	9.59
Maximum power voltage (Vmpp)	V	32.04	32.6
Maximum power current (Impp)	A	9.06	9.21
Module efficiency	%	17.75	18.37

<i>Nominal Module Operating Temperature NMOT: 800 W/mq - T=45 °C - AM 1.5</i>			
Module power (Pmax)	W	213.01	220.36
Open circuit voltage (Voc)	V	36.41	37.04
Short circuit current (Isc)	A	7.75	7.89
Maximum power voltage (Vmpp)	V	29	29.50
Maximum power current (Impp)	A	7.35	7.47

TEMPERATURE RATINGS

Temperature coefficient Isc	%/°C	0.0344
Temperature coefficient Voc	%/°C	-0.273
Temperature coefficient Pmax	%/°C	-0.389
NMOT *	°C	45
Operating temperature	°C	da -40 a +85

* Nominal Module Operating Temperature

MECHANICAL SPECIFICATIONS

Dimensions	1650 x 990 x 35 mm
Weight	17.7 kg
Glass	Tempered, transparent, 3.2 mm
Cell encapsulation	EVA (Ethylene Vinyl Acetate)
Cells	60 monocrystalline PERC cells 156.75x156.75 mm
Backsheet	Composite multilayer film
Frame	Anodized aluminium frame with mounting and drainage holes
Junction box	Certified according to IEC 62790, IP 68 approved
Cables	Solar cable, length 900 mm assembled with MC4-combinable plugs
Maximum reverse current (Ir)	20 A
Maximum system voltage	1000 V (1500 V on request)
Maximum load (wind/snow)	5400 Pa (including safety factor 1.5)
Protection Class	II - accordance to IEC 61730

Authorized Dealer



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