



Engineered
in Italy

NEW
5 BUSBAR

FU 300 / 305 / 310 / 315 / 320 / 325 / 330 P

Polycrystalline Photovoltaic Module - 72 Cells



GENERAL FEATURES

- **15-year product warranty**
- **High-efficiency cells** 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)
- Quality control with **electroluminescence (EL) tests** on each module

CERTIFICATIONS

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

NEW

GUARANTEES

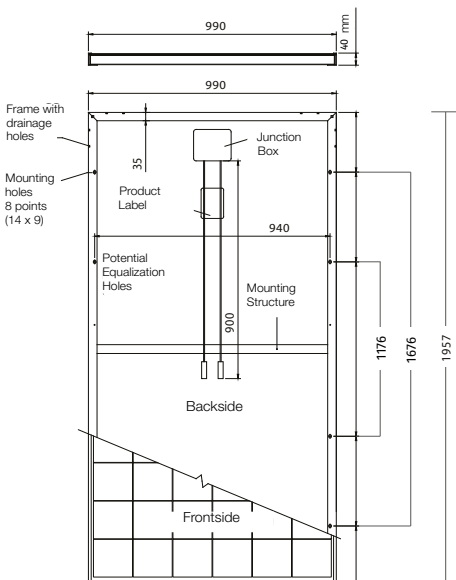
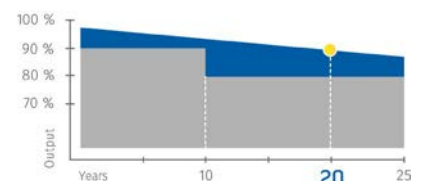
Performance guarantee

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



Note: dimensions in mm
tolerance +/- 2 mm

ELECTRICAL DATA

MODULE		FU 300 P	FU 305 P	FU 310 P	FU 315 P	FU 320 P	FU 325 P	FU 330 P
<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	300	305	310	315	320	325	330
Open circuit voltage (Voc)	V	45.05	45.4	45.70	46	46.30	46.6	46.9
Short circuit current (Isc)	A	8.74	8.80	8.85	8.91	8.97	9.02	9.07
Maximum power voltage (Vmpp)	V	36.49	36.80	37.10	37.42	37.75	38.01	38.35
Maximum power current (Impp)	A	8.23	8.3	8.37	8.43	8.5	8.56	8.63
Module efficiency	%	15.48	15.74	16.00	16.26	16.52	16.77	17.03

Nominal Module Operating Temperature NMOT: 800 W/mq - T=45 °C - AM 1.5

Module power (Pmax)	W	219.54	223.20	226.86	230.52	234.18	237.84	241.49
Open circuit voltage (Voc)	V	41.36	41.68	41.96	42.23	42.51	42.78	43.06
Short circuit voltage (Isc)	A	7.18	7.23	7.27	7.32	7.37	7.41	7.45
Maximum power voltage (Vmpp)	V	33.05	33.33	33.6	33.89	34.19	34.43	34.73
Maximum power current (Impp)	A	6.65	6.70	6.76	6.81	6.87	6.91	6.97

TEMPERATURE RATINGS

Temperature coefficient Isc	%/°C	0.0474
Temperature coefficient Voc	%/°C	-0.285
Temperature coefficient Pmax	%/°C	-0.37
NMOT*	°C	45
Operating temprature	°C	from -40 to +85

* Nominal Module Operating Temperature

MECHANICAL SPECIFICATIONS

Dimensions	1957 x 990 x 40 mm
Weight	22.5 kg
Glass	Tempered, transparent, 3.2 mm
Cell encapsulation	EVA (Ethylene Vinyl Acetate)
Cells	72 polycrystalline 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 (1500 mm upon request) 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



FuturaSun srl

Riva del Pasubio, 14 - 35013 Cittadella - Italy
Tel + 39 049 5979802 Fax + 39 049 0963081
www.futurasun.com - info@futurasun.it