



Engineered
in Italy

**GLASS/
GLASS**

FU 320 / 325 / 330 M Duetto

Monocrystalline Photovoltaic Module - 60 cells - glass/glass



CE

GENERAL FEATURES

- **Black framed glass-glass structure** with strong load capacity
- **30-years performance guarantee**
- **Dual glass reduces the risk of micro-cracks, snail trails, corrosions** caused by moisture, sand and salt mist
- **Lightweight tempered 2x2 mm safety glass** for optimal mechanical stability and transparency
- Tested internally at a **maximum load of 8100 Pa**
- Maximum **fire resistance**
- Quality control with **electroluminescence (EL) tests** on each module



GUARANTEES

Duetto Performance guarantee

30 YEARS NEW

Max power decrease **0.5%/year**

97% at the end of first year

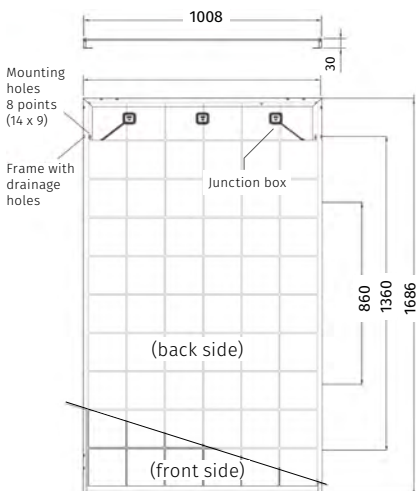
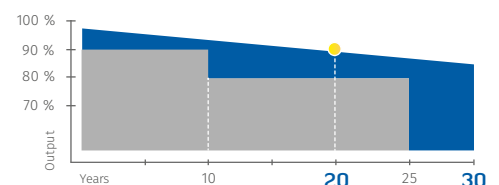
90% at the end of 20th year

85% at the end of 30th year NEW

Product guarantee

15 YEARS NEW

- Market standard performances
- FuturaSun Duetto linear performances



Note: dimensions in mm
tolerance +/- 2 mm

ELECTRICAL DATA

MODULE Duetto		FU 320 M Duetto	FU 325 M Duetto	FU 330 M Duetto
<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	320	325	330
Open circuit voltage (Voc)	V	41.24	41.44	41.66
Short circuit current (Isc)	A	9.88	9.96	10.04
Maximum power voltage (Vmpp)	V	33.68	33.93	34.17
Maximum power current (Impp)	A	9.51	9.58	9.66
Module efficiency	%	19.18	19.48	19.78

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

Module power (Pmax)	W	235.11	238.60	242.29
Open circuit voltage (Voc)	V	38.04	38.22	38.43
Short circuit current (Isc)	A	8.12	8.19	8.26
Maximum power voltage (Vmpp)	V	30.48	30.71	30.92
Maximum power current (Impp)	A	7.71	7.77	7.84

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	from -40 to +85

* Nominal Module Operating Temperature

MECHANICAL SPECIFICATIONS

Dimensions	1686 x 1008 x 30 mm
Weight	22 kg
Glass	Tempered, transparent, 2 x 2 mm
Cell encapsulation	EVA (Ethylene Vinyl Acetate)
Cells	60 monocrystalline full square PERC cells 158.75x158.75 mm
Frame	Anodized black aluminium frame with mounting and drainage holes
Junction box	Certified according to IEC 62790, IP 68 approved
Cables	Solar cable, length 600 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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