



**MULTI  
BUSBAR**

**FU 400 / 405 / 410 / 415 M SILK<sup>®</sup> Plus**  
Monocrystalline Photovoltaic Module - 108 half-cut MBB cells

Engineered  
in Italy

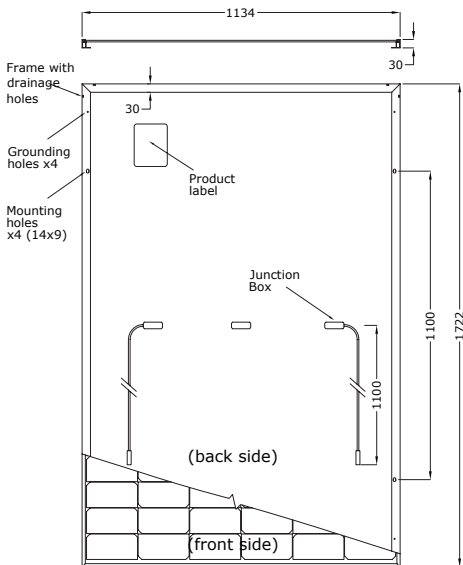
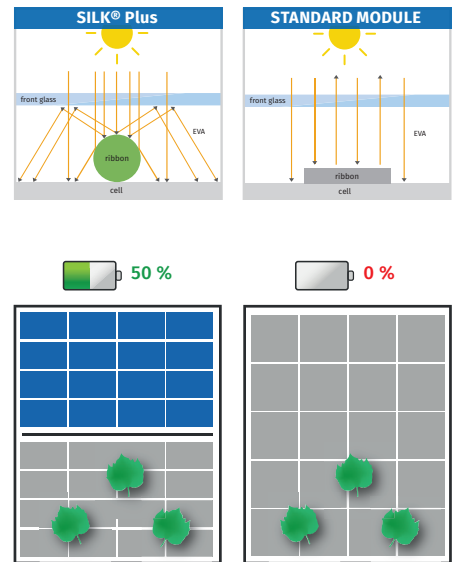


- > IEC 61215:2016 - IEC 61730:2016 & Factory Inspection
- > Fire Resistance - Class C



**GENERAL FEATURES**

- 15-year product warranty
- 108 large area PERC cells 182 mm
- High module efficiency up to 21.25 %
- Less shades and more reflected light to the cell thanks to the round ribbon
- 2 independent section design secures a higher energy yield in case of shading
- Lower risk of micro cracks and hot-spot
- Improved low light performance
- Low NMOT, improving the power generation efficiency
- Half cut design in combination with multi busbar reduce operating current and internal resistance



Note: dimensions in mm tolerance +/- 2 mm

**GUARANTEES**

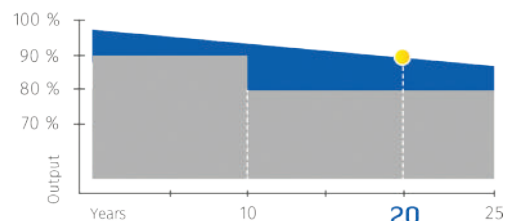
**Performance guarantee**

Max power decrease **0.5%/year**  
97% at the end of first year  
**90% at the end of 20<sup>th</sup> year** **NEW**  
87% at the end of **25<sup>th</sup> year**

**Product guarantee**

**15 YEARS** **NEW**

■ Market standard performances  
■ FuturaSun performances



## ELECTRICAL DATA

MODULE SILK® Plus	FU 400 M SILK® Plus	FU 405 M SILK® Plus	FU 410 M SILK® Plus	FU 415 M SILK® Plus
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*Standard Test Conditions STC: 1000 W/sqm - AM 1.5 - 25 °C - tolerance: Pmax (±3%), Voc (±4%), Isc (±5%)*

Module power (Pmax)	W	400	405	410	415
Open circuit voltage (Voc)	V	3713	3724	3735	3746
Short circuit current (Isc)	A	13.75	13.82	13.89	13.96
Maximum power voltage (Vmpp)	V	31.01	31.18	31.36	31.55
Maximum power current (Impp)	A	12.90	12.99	13.08	13.16
Module efficiency	%	20.48	20.74	21.00	21.25

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

Module power (Pmax)	W	300	304	308	312
Open circuit voltage (Voc)	V	34,97	35.11	35.24	35.37
Short circuit current (Isc)	A	10.94	11.03	11.12	11.21
Maximum power voltage (Vmpp)	V	29.19	29.36	29.53	29.69
Maximum power current (Impp)	A	10.28	10.36	10.43	10.51

## TEMPERATURE RATINGS

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

\*Nominal Module Operating Temperature

## MECHANICAL SPECIFICATIONS

Dimensions	1722 x 1134 x 30 mm
Weight	20.8 kg
Glass	High transmission, Low iron, Tempered, ARC, Transparent, 3.2 mm
Cell encapsulation	EVA (Ethylene Vinyl Acetate)
Cells	108 monocrystalline half-cut MBB PERC cells 182 x 91 mm
Backsheet	Composite multilayer film
Frame	Anodized aluminium frame with mounting and drainage holes
Junction box	Certified according to IEC 62790, IP 68 approved, 3 bypass diodes
Cables	Solar cable, length 1100 mm or customized assembled with MC4-compatible plugs
Maximum reverse current (Ir)	25 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)
Protection Class	II - accordance to IEC 61730

Authorized Dealer



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