



**MULTI
BUSBAR**

FU 435 / 440 / 460 MV Silk® Pro

Monocrystalline Photovoltaic Module - 144 half-cut MBB cells

Engineered
in Italy

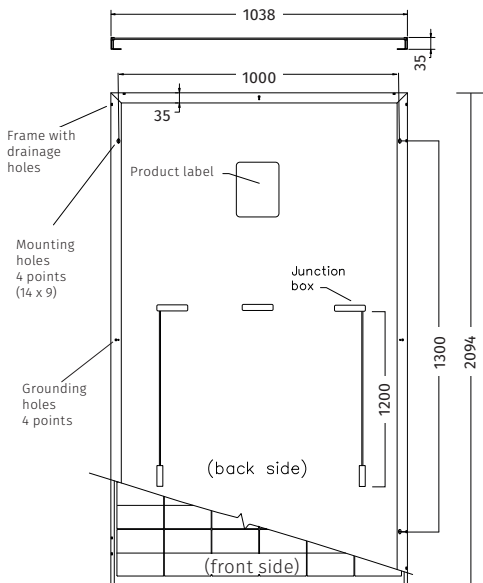
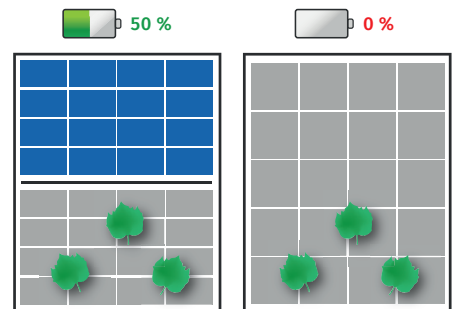
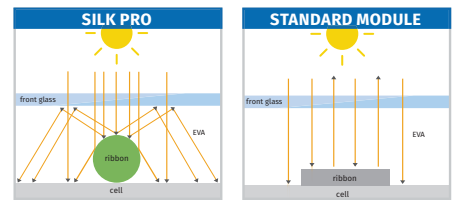


- > IEC 61215:2016 - IEC 61730:2016 & Factory Inspection
- > Fire Class C as per UL 790



GENERAL FEATURES

- 15-year product warranty
- 9 busbar 166 mm half-cut PERC cells
- High module efficiency up to 20.82%
- 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 hot spot and micro cracks
- 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

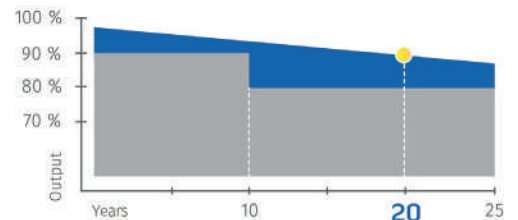
90% at the end of 20th year **NEW**

87% at the end of 25th year

Product guarantee

15 YEARS **NEW**

Market standard performances
FuturaSun performances



ELECTRICAL DATA

MODULE SILK® Pro		FU 435 MV SILK® Pro	FU 440 MV SILK® Pro	FU 460 MV SILK® Pro
<i>Standard Test Conditions STC: 1000 W/m² - AM 1.5 - 25 °C - tolerance: Pmax (±3%), Voc (±4%), Isc (±5%)</i>				
Module power (Pmax)	W	435	440	460
Open circuit voltage (Voc)	V	48.90	49.10	49.90
Short circuit current (Isc)	A	11.24	11.30	11.55
Maximum power voltage (Vmpp)	V	40.74	40.94	41.71
Maximum power current (Impp)	A	10.68	10.75	11.03
Module efficiency	%	19.70	19.90	20.82

Nominal Module Operating Temperature NMOT: 800 W/m² - T=45 °C - AM 1.5

Module power (Pmax)	W	323	327	342
Open circuit voltage (Voc)	V	45.80	45.99	46.72
Short circuit current (Isc)	A	9.08	9.13	9.33
Maximum power voltage (Vmpp)	V	38.40	38.60	39.40
Maximum power current (Impp)	A	8.41	8.47	8.68

TEMPERATURE RATINGS

Temperature coefficient Isc	%/°C	0.05
Temperature coefficient Voc	%/°C	-0.28
Temperature coefficient Pmax	%/°C	-0.35
NMOT **	°C	45
Operating temperature	°C	from -40 to +85

**Nominal Module Operating Temperature *For All Black version

MECHANICAL SPECIFICATIONS

Dimensions	2094 x 1038 x 35 mm
Weight	23.6 kg
Glass	High transmission, Low iron, Tempered, ARC, Transparent, 3.2 mm
Cell encapsulation	EVA (Ethylene Vinyl Acetate)
Cells	144 monocrystalline half-cut PERC cells 166 x 83 mm
Backsheet	White or black* composite multilayer film
Frame	Silver or black* 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 1200 mm assembled with TongLing TL-CABLE01S or Zhejiang Jiaming PV-JM608
Maximum reverse current (Ir)	20 A
Maximum system voltage	1500 V
Mechanical load (snow)	Design load: 3600 Pa
Mechanical load (wind)	Design load: 1600 Pa
Protection Class	II - accordance to IEC 61730
Manufacturer	Made in China

Authorized Dealer

2021_144mv_435-460_Silk_Pro_en



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