



**BIPV**

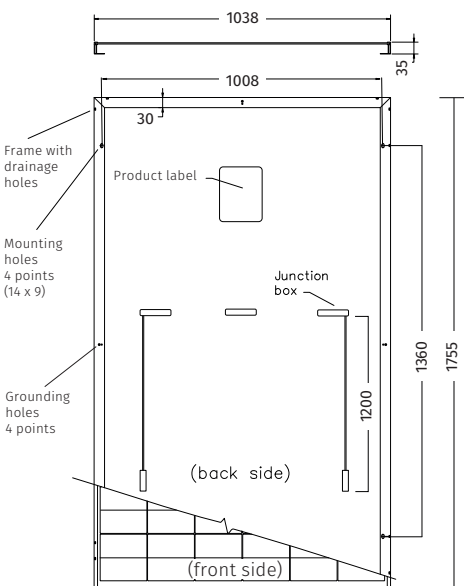
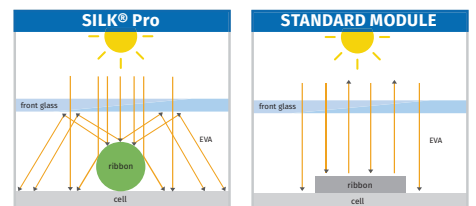
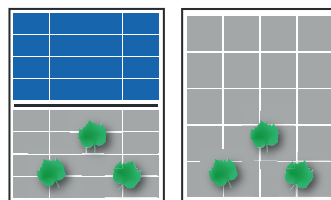
**FU 280 / 285 / 290 / 295 M SILK<sup>®</sup> Pro Silver**  
Monocrystalline Photovoltaic Module - 120 half-cut MBB cells

Engineered  
in Italy



**GENERAL FEATURES**

- 15-year product warranty
- **Silver colored glass** for special architectural requirements
- Particularly suitable for **Building Integrated Photovoltaics**
- Possibility to **customize the frame color**
- Other glass colors available
- Module configuration with half cut design for an **improved behavior under shaded conditions**



Note: dimensions in mm  
tolerance +/- 2 mm

**GUARANTEES**

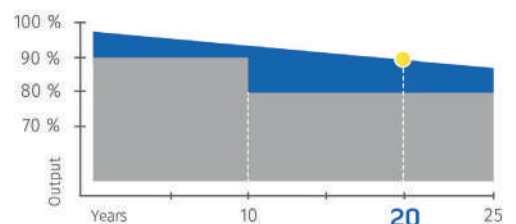
**Performance guarantee**

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



\*All images shown are for illustration purpose only, product appearance may vary according to the installation, light and ambient reflection.

## ELECTRICAL DATA

MODULE SILK® Pro		FU 280 M SILK® Pro Silver	FU 285 M SILK® Pro Silver	FU 290 M SILK® Pro Silver	FU 295 M SILK® Pro Silver
<i>Standard Test Conditions STC: 1000 W/m<sup>2</sup> - AM 1.5 - 25 °C - tolerance: Pmax (±3%). Voc (±4%). Isc (±5%)</i>					
Module power (Pmax)	W	280	285	290	295
Open circuit voltage (Voc)	V	40.5	40.7	40.9	41.1
Short circuit current (Isc)	A	8.72	8.79	8.86	8.93
Maximum power voltage (Vmpp)	V	34.02	34.23	34.43	34.63
Maximum power current (Impp)	A	8.29	8.36	8.43	8.50
Module efficiency	%	15,37	15,64	15,92	16.19

### *Nominal Module Operating Temperature NMOT: 800 W/m<sup>2</sup> - T=45 °C - AM 1.5*

Module power (Pmax)	W	213	216	220	223
Open circuit voltage (Voc)	V	38.21	38.41	38.62	38.82
Short circuit current (Isc)	A	6.87	6.93	6.98	7.03
Maximum power voltage (Vmpp)	V	31.86	32.06	32.24	32.42
Maximum power current (Impp)	A	6.69	6.75	6.81	6.87

## 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

## MECHANICAL SPECIFICATIONS

Dimensions	1755 x 1038 x 35 mm
Weight	20.3 kg
Glass	Silver colored, Low iron, Tempered, ARC, Transparent, 3.2 mm
Cell encapsulation	EVA (Ethylene Vinyl Acetate)
Cells	120 monocrystalline half-cut PERC cells 166 x 83 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 1200 mm or customized assembled with MC4-compatible plugs
Maximum reverse current (Ir)	20 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

**TEKNOGEA**

AN ECO FRIENDLY COMPANY

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**FuturaSun®**  
anticipate tomorrow

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