

# FU 400/405/410/415 M Silk® Plus

## PERC MBB half-cut cells

### PERFORMANCE GUARANTEE

Max power decrease from 2<sup>nd</sup> year 0,5%/year  
 97% at the end of first year  
 90% at the end of 20<sup>th</sup> year  
 87% at the end of 25<sup>th</sup> year



**400 - 415 Wp**

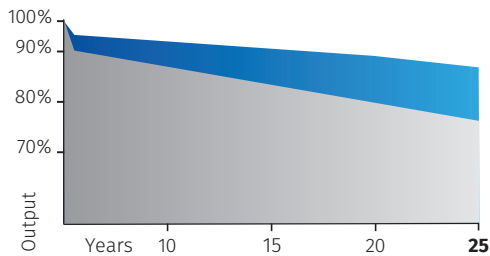
**POWER RANGE**

**-0.35 %/°C**

**TEMPERATURE COEFFICIENT**



**108 HALF-CUT MBB CELLS**



■ Market standard performances  
 ■ FuturaSun performances

### GENERAL FEATURES & KEY BENEFITS



· 25-year performance guarantee & 15-year product warranty

· Up to 21.25 % module efficiency equal to 212.5 Wp/m<sup>2</sup>



· Two independent section design secures a higher energy yield under shaded conditions



· Half-cut design in combination with multi busbar reduces operating current and internal resistance

· Lower risk of micro-cracks and hot-spot



· Less shades and more reflected light to the cell thanks to the round ribbon



· Excellent versatility for different system applications

· Long cable as standard suitable for landscape configurations

### CERTIFICATIONS

IEC 61215:2016 - IEC 61730:2016  
 & Factory Inspection

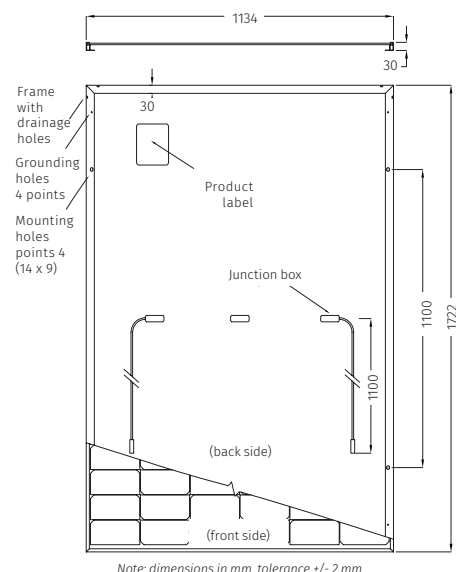
Fire Resistance - Class C



For detailed information, please refer to the installation manual

**MECHANICAL SPECIFICATIONS**

Dimensions	1722 x 1134 x 30 mm
Weight	20.8 kg
Glass	High transmission, Low iron, Tempered, ARC, Thickness 3.2 mm
Cells	108 monocrystalline half cut MBB PERC cells 182 x 91 mm
Frame	Anodized aluminium frame with mounting and drainage holes
Junction boxes	Certified according to IEC 62790, IP 68 approved, 3 bypass diodes
Cables	Solar cable, length 1100 mm or customized assembled with 4 mm <sup>2</sup> compatible connectors
Maximum reverse current (I <sub>r</sub> )	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



**ELECTRICAL DATA - STC\***

		FU 400 M	FU 405 M	FU 410 M	FU 415 M
Module power (P <sub>max</sub> )	W	400	405	410	415
Open circuit voltage (V <sub>oc</sub> )	V	37.13	37.24	37.35	37.46
Short circuit current (I <sub>sc</sub> )	A	13.75	13.82	13.89	13.96
Maximum power voltage (V <sub>mpp</sub> )	V	31.01	31.18	31.36	31.55
Maximum power current (I <sub>mpp</sub> )	A	12.90	12.99	13.08	13.16
Module efficiency	%	20.48	20.74	21.00	21.25

**ELECTRICAL DATA - NMOT\*\***

		FU 400 M	FU 405 M	FU 410 M	FU 415 M
Module power (P <sub>max</sub> )	W	300	304	308	312
Open circuit voltage (V <sub>oc</sub> )	V	34.97	35.11	35.24	35.37
Short circuit current (I <sub>sc</sub> )	A	10.94	11.03	11.12	11.21
Maximum power voltage (V <sub>mpp</sub> )	V	29.19	29.36	29.53	29.69
Maximum power current (I <sub>mpp</sub> )	A	10.28	10.36	10.43	10.51

**TEMPERATURE RATINGS**

Temperature coefficient I <sub>sc</sub>	%/°C	0.05
Temperature coefficient V <sub>oc</sub>	%/°C	-0.27
Temperature coefficient P <sub>max</sub>	%/°C	-0.35
NMOT**	°C	45
Operating temperature	°C	from -40 to +85

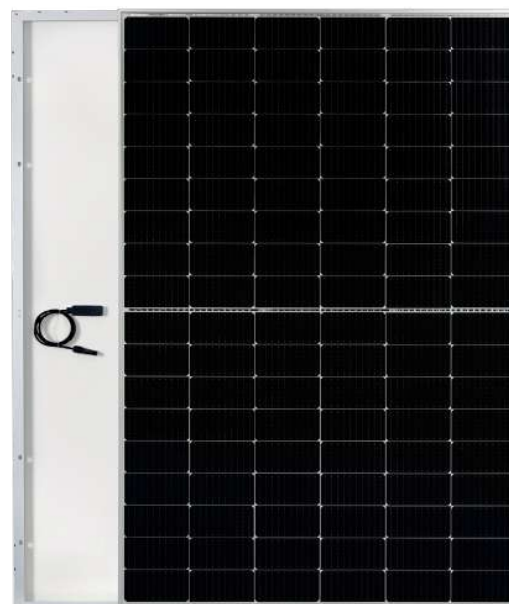
**PACKAGING INFORMATION**

Quantity / Pallet	36 pcs
Container 40' HQ	936 pcs / 26 pallets

\*Standard Test Conditions STC: 1000 W/m<sup>2</sup> - AM 1.5 - 25 °C - tolerance: P<sub>max</sub> (±3%), V<sub>oc</sub> (±4%), I<sub>sc</sub> (±5%).  
 \*\*Nominal Module Operating Temperature NMOT: 800 W/m<sup>2</sup> - T=45 °C - AM 1.5.  
 Notice: All data and specifications are preliminary and subject to change without notice.



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