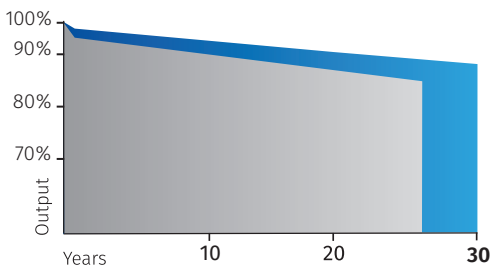


N-TYPE  
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N-TYPE

## FU 415/420/425/430 M Silk<sup>®</sup> Nova Duetto Bifacial MBB N-type half-cut cells

### PERFORMANCE GUARANTEE

Max power decrease from 1<sup>st</sup> year 0.4%/year  
99% at the end of first year  
92% at the end of 20<sup>th</sup> year  
87% at the end of 30<sup>th</sup> year



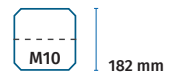
■ Market standard performances  
■ FuturaSun performances

**415 - 430 Wp**

**POWER RANGE**

**-0.29 %/°C**

**TEMPERATURE COEFFICIENT**



**108 BIFACIAL HALF-CUT CELLS**

### GENERAL FEATURES & KEY BENEFITS



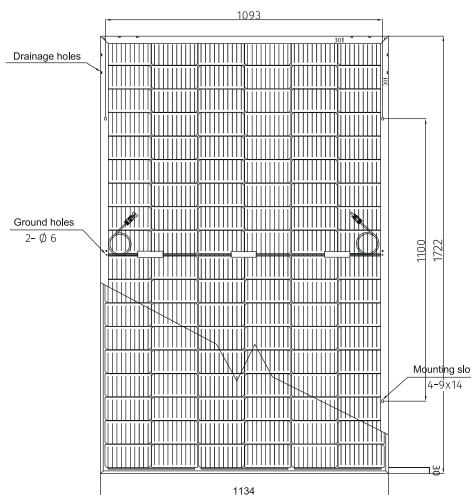
- 30-year performance guarantee & 15-year product warranty
- Up to 22 % module efficiency equal to 220 Wp/m<sup>2</sup>
- Two independent section design secures a higher energy yield under shaded conditions
- Up to 85% bifaciality factor
- Half-cut design in combination with multi-busbar reduces operating current and internal resistance
- Resistant to LID (Light Induced Degradation) and LeTID (Light and elevated Temperature Induced Degradation)
- Lower risk of micro-cracks and hot-spot
- 2+2 mm black framed glass-glass structure for optimal mechanical stability.
- Excellent temperature coefficient -0,29 %/°C
- Improved low light performance
- Increased light absorption



For detailed information, please refer to the installation manual

**MECHANICAL SPECIFICATIONS**

Dimensions	1722 x 1134 x 30 mm
Weight	25,4 kg
Glass	Front - 2.0 mm Solar glass with ARC Back - 2.0 mm Solar glass with white grid
Cells	108 half-cut bifacial N-Type 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 4mm <sup>2</sup> compatible connectors
Maximum reverse current (Ir)	30 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



Note: dimensions in mm, tolerance +/- 2 mm

**ELECTRICAL DATA - STC\***

		FU 415 M	FU 420 M	FU 425 M	FU 430 M
Module power (Pmax)	W	415	420	425	430
Open circuit voltage (Voc)	V	37.87	38.06	38.25	38.44
Short circuit current (Isc)	A	14.01	14.09	14.17	14.25
Maximum power voltage (Vmpp)	V	31.30	31.49	31.67	31.86
Maximum power current (Imp)	A	13.26	13.34	13.42	13.5
Module efficiency	%	21.3	21.5	21.8	22

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

		FU 415 M	FU 420 M	FU 425 M	FU 430 M
Module power (Pmax)	W	312	316	320	323
Open circuit voltage (Voc)	V	35.99	36.18	36.36	36.54
Short circuit current (Isc)	A	11.31	11.38	11.44	11.51
Maximum power voltage (Vmpp)	V	29.19	29.32	29.48	29.61
Maximum power current (Imp)	A	10.69	10.77	10.84	10.91

**TEMPERATURE RATINGS**

Temperature coefficient Isc	%/°C	0.045
Temperature coefficient Voc	%/°C	-0.25
Temperature coefficient Pmax	%/°C	-0.29
NMOT**	°C	45 ± 2
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: Pmax (±3%), Voc (±4%), Isc (±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.

