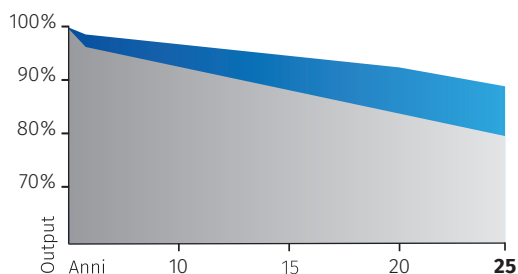


N-TYPE
N
N-TYPE

FU 415/420/425/430 M Silk[®] Nova N-Type MBB half-cut cells

PERFORMANCE GUARANTEE

Max power decrease from 2nd year 0,4%/year
99% at the end of first year
92% at the end of 20th year
89% at the end of 25th year



■ Market standard performances
■ FuturaSun performances

CERTIFICATIONS

Ongoing IEC 61215 - IEC 61730

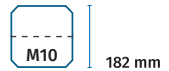


415 - 430 Wp

POWER RANGE

-0.29 %/°C

TEMPERATURE COEFFICIENT



108 N-TYPE MBB HALF-CUT CELLS

GENERAL FEATURES & KEY BENEFITS



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

· Up to 22% module efficiency equal to 220 Wp/m²

· 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

· Resistant to LID (Light Induced Degradation) and LeTID (Light and elevated Temperature Induced Degradation)



· Long cable as standard suitable for landscape configurations

· Excellent temperature coefficient -0,29 %/°C



· Improved low light performance

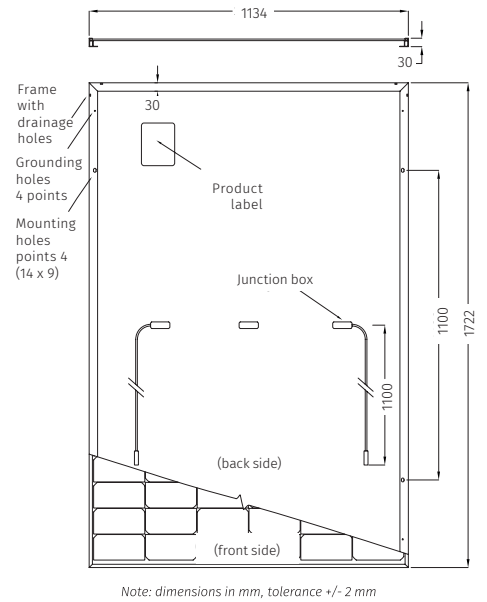
· Increased light absorption

For detailed information, please refer to the installation manual



MECHANICAL SPECIFICATIONS

Dimensions	1722 x 1134 x 30 mm
Weight	20.8 kg
Glass	High transmission, Low iron, Tempered, ARC, Thickness, 3.2 mm
Cells	108 half-cut MBB N-Type cells 182 X 91
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 ² compatible connectors
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



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 (Impp)	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 (Impp)	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/m² - AM 1.5 - 25 °C - tolerance: Pmax (±3%), Voc (±4%), Isc (±5%).
 **Nominal Module Operating Temperature NMOT: 800 W/m² - T=45 °C - AM 1.5.
 Notice: All data and specifications are preliminary and subject to change without notice.

