

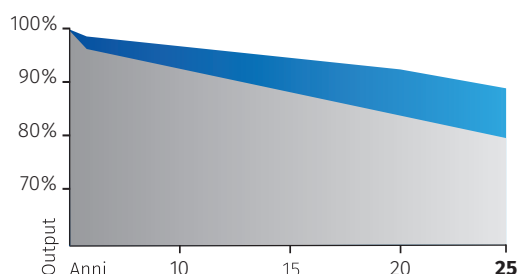
N-TYPE
(N)
N-TYPE

FU 410/415/420/425 M Silk® Nova All Black

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



410 - 425 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

• Elegant **all black** front side design

• Up to 21.8% module **efficiency** equal to 218 Wp/m²



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

• 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

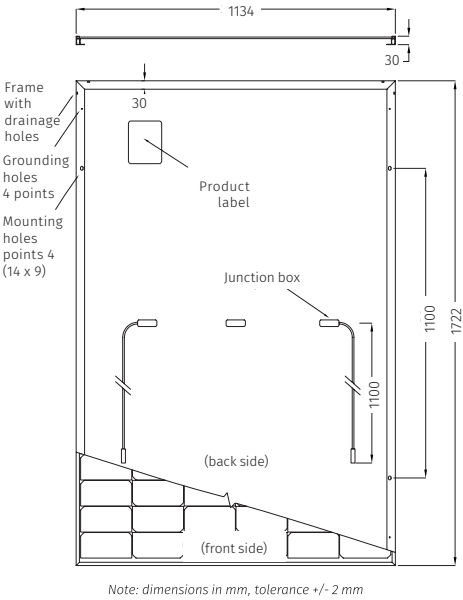
• Increased light absorption

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 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 mm² 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 410 M	FU 415 M	FU 420 M	FU 425 M
Module power (Pmax)	W	410	415	420	425
Open circuit voltage (Voc)	V	37.68	37.87	38.06	38.25
Short circuit current (Isc)	A	13.94	14.01	14.09	14.17
Maximum power voltage (Vmpp)	V	31.11	31.30	31.49	31.67
Maximum power current (Impp)	A	13.18	13.26	13.34	13.42
Module efficiency	%	21	21.3	21.5	21.8

ELECTRICAL DATA - NMOT**

		FU 410 M	FU 415 M	FU 420 M	FU 425 M
Module power (Pmax)	W	308	312	316	320
Open circuit voltage (Voc)	V	35.82	35.99	36.18	36.36
Short circuit voltage (Isc)	A	11.24	11.31	11.38	11.44
Maximum power voltage (Vmpp)	V	29.03	29.19	29.32	29.48
Maximum power current (Impp)	A	10.62	10.69	10.77	10.84

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.

