

Silk[®] Nova Duetto All Black



n-type

TECHNOLOGY
INSIDE

430 W 22 %

Maximum power

Maximum efficiency

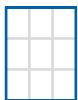
KEY BENEFITS AND FEATURES



Power from **420 to 430 Watt**



108 M10 HC MBB **n-type bifacial** cells



Black frame and black-grid



Optimised frontal performance



Improved **long-life stability**



1722 x 1134 x 30 mm

Performance guarantee

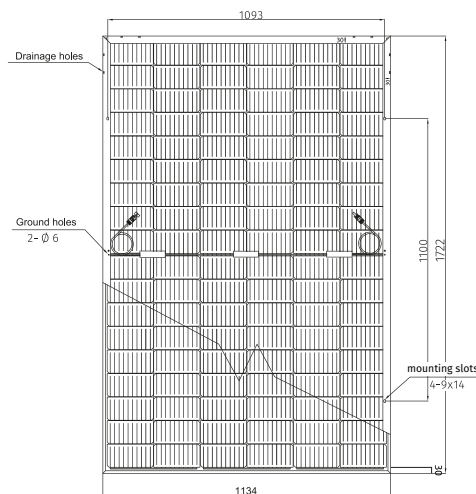
- **30-years** performance warranty with max power decrease from 1st year **0.4%/year**
- **99%** at the end of first year
- **92%** at the end of 20th year
- **87%** at the end of 30th year

Product guarantees

- **15-year** product and performance warranty
- Third-party product **liability** insurance
- All FuturaSun's modules are designed and guaranteed by the **Italian** headquarters

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 Black Grid
Cells	108 monocrystalline half-cut MBB n-type bifacial cells 182 x 91 mm
Frame	Black 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 ² compatible connectors
Back glass	Black grid
Maximum reverse current (I _r)	30 A
Maximum system voltage	1500 V
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)



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

Electrical data

		FU 420 MV		FU 425 MV		FU 430 MV	
TEST CONDITIONS		STC [*]	BSTC ^{**}	STC [*]	BSTC ^{**}	STC [*]	BSTC ^{**}
Module power (P _{max})	W	420	465.11	425	470.93	430	476.62
Open circuit voltage (V _{oc})	V	38.06	38.06	38.25	38.25	38.44	38.44
Short circuit current (I _{sc})	A	14.09	15.61	14.17	15.70	14.25	15.79
Maximum power voltage (V _{mpp})	V	31.49	31.49	31.67	31.67	31.86	31.86
Maximum power current (I _{mpp})	A	13.34	14.77	13.42	14.87	13.5	14.96
Module efficiency	%	21.5	23.8	21.8	24.1	22	24.4
Sorting tolerance	W	0/+5					

Electrical data - NOCT^{***}

		FU 420 MV	FU 425 MV	FU 430 MV
Module power (P _{max})	W	316	320	323
Open circuit voltage (V _{oc})	V	36.18	36.36	36.54
Short circuit current (I _{sc})	A	11.38	11.44	11.51
Maximum power voltage (V _{mpp})	V	29.32	29.48	29.61
Maximum power current (I _{mpp})	A	10.77	10.84	10.91

Temperature ratings

Temperature coefficient I _{sc}	%/°C	0.045
Temperature coefficient V _{oc}	%/°C	-0.25
Temperature coefficient P _{max}	%/°C	-0.29
NOCT ^{**}	°C	45 ± 2
Operating temperature	°C	from -40 to +85

Certifications

Factory	ISO 9001 - 14001 - 45001
Product	IEC EN 61215, IEC EN 61730, Fire Class C, Class 1 UNI9177

Packaging

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

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^{*}Standard Test Conditions STC: 1000 W/m² - AM 1.5 - 25 °C - tolerance: P_{max} (±3%), V_{oc} (±4%), I_{sc} (±5%)
^{**}Bifacial Standard Test Conditions (BSTC) Front side irradiation 1000 Wp / sqm Back side reflection irradiation 135 Wp / sqm Ambient temperature 25 °C
^{***}Nominal Operating Cell Temperature NOCT: 800 W/m² - T=45 °C - AM 1.5

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