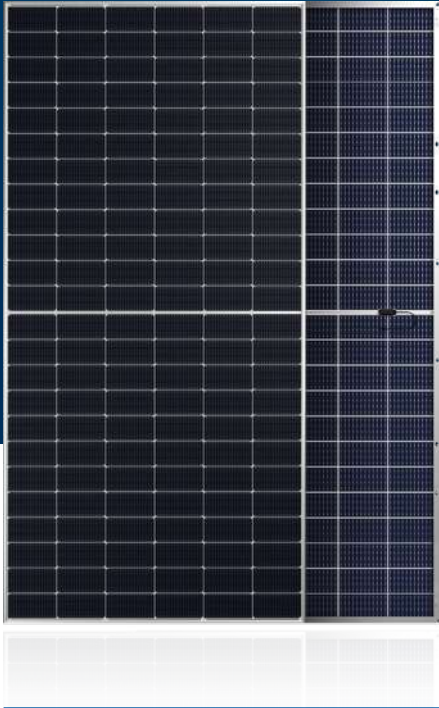


Silk[®] Nova Duetto



n-type

TECHNOLOGY
INSIDE

590 W **22.84 %**

Maximum power

Maximum efficiency

KEY BENEFITS AND FEATURES



Power from **565 to 590 Watt**



144 M10 **n-type** bifacial half-cut cells



Silver frame and white patterned back-glass



Ideal for **single-axis trackers**



Improved **long-life stability**



2278 x 1134 x 30 mm

Performance guarantee

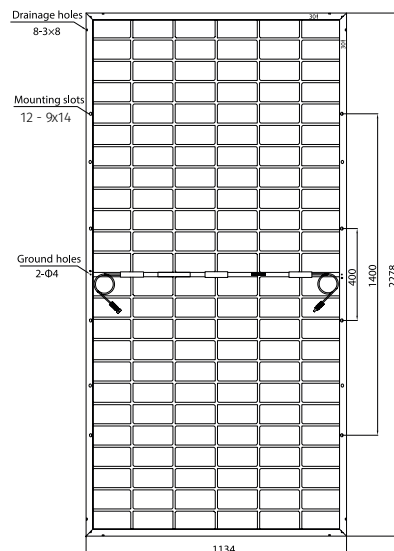
- **30-years** performance warranty with max power decrease from 1st year **0.4%/year**
- **99%** at the end of first year
- **92%** at the end of 20th year
- **87%** at the end of 30th year

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	2278 x 1134 x 30 mm
Weight	32 kg
Glass	Front - 2.0 mm solar glass with ARC Back - 2.0 mm heat strengthened glass
Cells	144 monocrystalline 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 1400 mm or customized assembled with 4mm ² compatible connectors
Back glass	Transparent - white 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 565 MV		FU 570 MV		FU 575 MV		FU 580 MV		FU 585 MV		FU 590 MV	
TEST CONDITIONS		STC*	BSTC**	STC*	BSTC**	STC*	BSTC**	STC*	BSTC**	STC*	BSTC**	STC*	BSTC**
Module power (P _{max})	W	565	625.84	570	631.86	575	637.07	580	642.72	585	648.26	590	653.80
Open circuit voltage (V _{oc})	V	50.58	50.58	50.72	50.72	50.86	50.86	51.00	51.00	51.14	51.14	51.28	51.28
Short circuit current (I _{sc})	A	14.24	15.77	14.32	15.86	14.40	15.95	14.48	16.04	14.56	16.13	14.64	16.22
Maximum power voltage (V _{mpp})	V	41.89	41.89	42.04	42.04	42.19	42.19	42.34	42.34	42.50	42.50	42.65	42.65
Maximum power current (I _{mpp})	A	13.49	14.94	13.56	15.03	13.63	15.10	13.70	15.18	13.77	15.26	13.84	15.34
Module efficiency	%	21.80	24.20	22.00	24.5	22.20	24.70	22.40	24.90	22.65	25.18	22.84	25.39
Sorting tolerance	W	0/+5											

Electrical data - NOCT***		FU 565 MV	FU 570 MV	FU 575 MV	FU 580 MV	FU 585 MV	FU 590 MV
Module power (P _{max})	W	425	429	433	436	439.76	443.52
Open circuit voltage (V _{oc})	V	48.05	48.19	48.31	48.45	48.58	48.72
Short circuit current (I _{sc})	A	11.50	11.50	11.63	11.69	11.75	11.82
Maximum power voltage (V _{mpp})	V	39.37	39.50	39.59	39.68	39.83	39.97
Maximum power current (I _{mpp})	A	10.80	10.86	10.93	11.00	11.06	11.11

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 Classe 1 UNI9177

Packaging

Quantity / Pallet	36 pcs
Container 40' HC	720 pcs / 20 pallets

The information included in this module datasheet is subject to change without notice and is provided for informational purposes only. No contractual rights are established or should be inferred because of user's reliance on the information contained in this module datasheet. Please refer to the appropriate module user guide and module product specification document for more detailed technical information regarding module performance, installation and use.

*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

EN_02