

# FU 490/495/500/505/510 MV Silk<sup>®</sup> Premium PERC MBB half-cut cells

### **PERFORMANCE GUARANTEE**

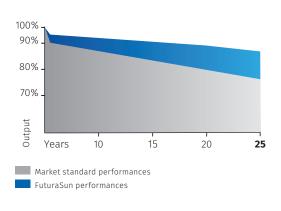
Max power decrease from 2<sup>nd</sup> year 0,5%/year 97% at the end of first year 90% at the end of 20<sup>th</sup> year 87% at the end of 25<sup>th</sup> year

490 - 510 Wp -0.35 %/°C	POWER	TEMPERATURE	
	490 - 510 Wp	-0.35 %/°C	

G12	210 mm

### TEMPERATURE COEFFICIENT

150 THIRD-CUT MBB CELLS



## CERTIFICATIONS

IEC 61215:2016 - IEC 61730:2016 & Factory Inspection Fire Resistance - Class C

### **GENERAL FEATURES & KEY BENEFITS**



RANGE

#### $\cdot$ 25-year performance guarantee & 15-year product warranty

- $\cdot$  Up to **21.25%** module <code>efficiency</code> equal to 212.5 Wp/m²
- **Two independent section** design secures a higher energy yield under shaded conditions
- Third-cut design in combination with multi-busbar reduces operating current and internal resistance
- $\cdot$  Lower risk of  $\ensuremath{\textit{micro-cracks}}$  and  $\ensuremath{\textit{hot-spot}}$
- $\cdot$  Less shades and more reflected light to the cell thanks to the  $\mathbf{round\ ribbon}$
- $\cdot$  **Excellent versatility** for different system applications



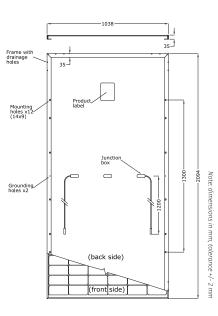
• Long cable as standard suitable for landscape configurations





#### MECHANICAL SPECIFICATIONS

Dimensions	2185 x 1098 x 35 mm
Weight	26,3 kg
Glass	High transmission, low iron, tempered, ARC, thickness, 3.2 mm
Cells	150 monocrystalline third cut MBB PERC cells 210 x 70 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 1300 mm or customized assembled with 4 mm² compatible connectors
Maximum reverse current (Ir)	20 A
Maximum system voltage	1500 V (1000 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 490 MV	FU 495 MV	FU 500 MV	FU 505 MV	FU 510 MV
Module power (Pmax)	W	490	495	500	505	510
Open circuit voltage (Voc)	V	51.20	51.40	51.60	51.80	52.00
Short circuit current (Isc)	А	12.17	12.24	12.31	12.38	12.44
Maximum power voltage (Vmpp)	V	42.47	42.64	42.85	43.06	43.26
Maximum power current (Impp)	А	11.54	11.61	11.67	11.73	11.79
Module efficiency	%	20.42	20.63	20.84	21.05	21.25

ELECTRICAL DATA - NMOT**		FU 490 MV	FU 495 MV	FU 500 MV	FU 505 MV	FU 510 MV
Module power (Pmax)	W	371	375	379	382	386
Open circuit voltage (Voc)	V	48.40	48.60	48.80	49.00	49.20
Short circuit voltage (Isc)	A	9.77	9.83	9.89	9.94	9.99
Maximum power voltage (Vmpp)	V	40.00	40.20	40.40	40.60	40.70
Maximum power current (Impp)	A	9.26	9.32	9.37	9.43	9.49

#### **TEMPERATURE RATINGS**

Temperature coefficient lsc	%/°C	0.05
Temperature coefficient Voc	%/°C	-0.26
Temperature coefficient Pmax	%/°C	-0.35
NMOT**	°C	43
Operating temperature	°C	from -40 to +85

#### PACKAGING

Quantity / Pallet	31 pcs
Container 40' HQ	620 pcs / 20 pallets

<sup>•</sup>Standard Test Conditions STC: 1000 W/m<sup>2</sup> - AM 1.5 - 25 <sup>°</sup>C - tolerance: Pmax (±3%). Voc (±4%). Isc (±5%). <sup>•</sup>Nominal Module Operating Temperature NMOT: 800 W/m<sup>2</sup> - T=45 <sup>°</sup>C - AM 1.5. Notice: All data and specifications are preliminary and subject to change without notice.



www.futurasun.com

