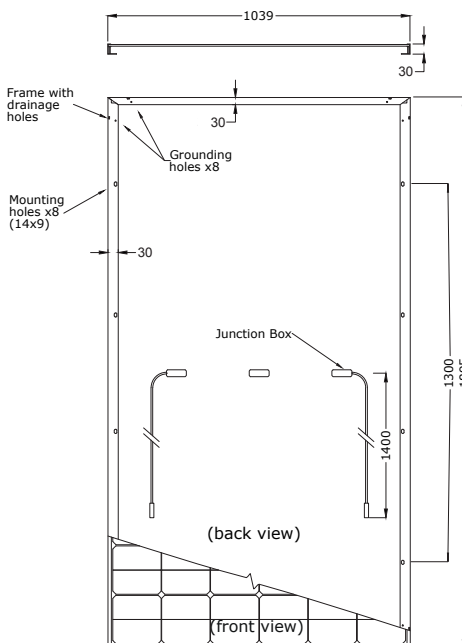




**BACK CONTACT**

**FU 420 / 425 / 430 M ZEBRA Pro**  
Monocrystalline Photovoltaic Module - 132 half-cut IBC cells

ZEBRA technology developed in Europe



Note: dimensions in mm tolerance +/- 2 mm

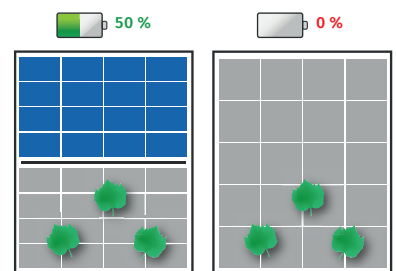
**GENERAL FEATURES**

- 25-year product & performance warranty
- 132 N-Type IBC Interdigitated Back Contact cells
- Superior module efficiency up to 21.84 %
- Excellent temperature coefficient -0.29 %/°C
- Market leading power stability over time (93% at the 25<sup>th</sup> year)
- Low Hot-Spot risk thanks to the distributed junction of the ZEBRA cell
- Resistant to LID and LeTID
- Improved low light performance
- Better yield with various tilts
- No shading on the cell thanks to IBC technology
- 2 independent section design secures a higher energy yield under shaded conditions and minimize the need of optimizers
- Reduced carbon footprint

**CERTIFICATIONS**

- > IEC 61215:2016 - IEC 61730:2016 & Factory Inspection
- > Fire Resistance - Class C
- > Salt Corrosion Resistance IEC 61701

**NEW**



**GUARANTEES**

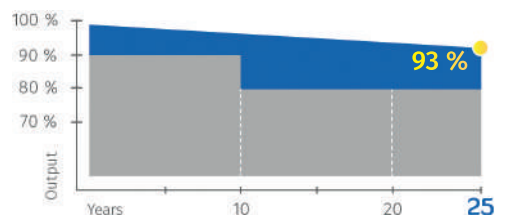
Product guarantee

**25 YEARS**

Performance guarantee

Max power decrease **0.25 %/year**  
**1<sup>st</sup> year degradation < 1,0%**  
 99 % at the end of first year  
**93 % at the end of 25<sup>th</sup> year**

Market standard performances  
 FuturaSun ZEBRA performances



## ELECTRICAL DATA

MODULE ZEBRA Pro		FU 420 M ZEBRA Pro	FU 425 M ZEBRA Pro	FU 430 M ZEBRA Pro
<i>Standard Test Conditions STC: 1000 W/m<sup>2</sup> - AM 1.5 - 25 °C - tolerance: Pmax (±3%), Voc (±4%), Isc (±5%)</i>				
Module power (Pmax)	W	420	425	430
Open circuit voltage (Voc)	V	45.91	46.01	46.13
Short circuit current (Isc)	A	11.66	11.76	11.87
Maximum power voltage (Vmpp)	V	38.74	38.97	39.16
Maximum power current (Impp)	A	10.85	10.91	10.99
Module efficiency	%	21.33	21.58	21.84

*Nominal Module Operating Temperature NMOT: 800 W/m<sup>2</sup> - T=42 °C - AM 1.5*

Module power (Pmax)	W	316	320	324
Open circuit voltage (Voc)	V	44.00	44.10	44.20
Short circuit current (Isc)	A	9.42	9.49	9.57
Maximum power voltage (Vmpp)	V	36.20	36.40	36.60
Maximum power current (Impp)	A	8.73	8.80	8.86

## TEMPERATURE RATINGS

Temperature coefficient Isc	%/°C	0.046
Temperature coefficient Voc	%/°C	-0.246
Temperature coefficient Pmax	%/°C	-0.290
NMOT *	°C	42 ± 2
Operating temperature	°C	from -40 to +85

\*Certification on going

## MECHANICAL SPECIFICATIONS

Dimensions	1895 x 1039 x 30 mm
Weight	20.9 kg
Glass	High transmission, Low iron, Tempered, ARC, Transparent, 3.2 mm
Cell encapsulation	POE (Polyolefin)
Cells	132 monocrystalline half-cut IBC cells 166 x 83 mm
Backsheet	Composite multilayer film
Frame	Black anodized aluminium frame with mounting and drainage holes
Junction box	Certified according to IEC 62790, IP 68 approved
Cables	Solar cable, length 1400 mm or customized assembled with MC4-compatible plugs
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

Notice: All data and specifications are preliminary and subject to change without notice

Authorized Dealer



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