



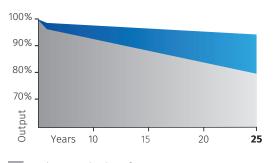
FU 420/425/430 M ZEBRA Pro N-Type IBC Half-Cut cells

ZEBRA Cell - European Intellectual Propert

PERFORMANCE GUARANTEE

Max power decrease from 2nd year 0,25%/year 1st year degradation < 1.0 %
99 % at the end of 1th year





Market standard performances
FuturaSun performances

93 % at the end of 25th year

CERTIFICATIONS

IEC 61215:2016 - IEC 61730:2016

420 - 430 Wp

POWER RANGE

-0.29 %/°C

TEMPERATURE COEFFICIENT



166 mm

132 HALF-CUT IBC ZEBRA CELLS

GENERAL FEATURES & KEY BENEFITS



- · 25-year product and performance warranty
- · Innovative ZEBRA Cell technology developed in Europe
- · Up to 21.84 % module efficiency equal to 218,4 Wp/m²



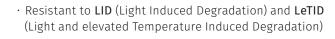
- · Excellent temperature coefficient -0.29 %/°C
- · Improved low light performance



- \cdot **Better yield** at various tilts
- No shading on the cell created by front ribbons thanks to IBC technology



- · Improved behaviour under partially shaded conditions
- \cdot Low $\mbox{Hot-Spot}$ risk thanks to the distributed junction of the ZEBRA cell







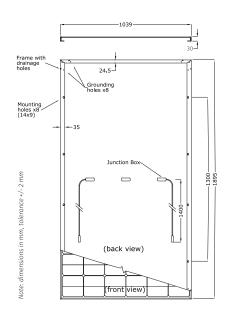






MECHANICAL SPECIFICATIONS

Dimensions	1895 x 1039 x 30 mm
Weight	21.0 kg
Glass	High transmission, Low iron, Tempered, ARC, Thickness, 3.2 mm
Cells	132 N-Type half-cut IBC cells 166 x 83 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 1400 mm or customized assembled with MC4-original 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



ELECTRICAL DATA - STC*		FU 420 M	FU 425 M	FU 430 M
Module power (Pmax)	W	420	425	430
Open circuit voltage (Voc)	V	45.91	46.01	46.13
Short circuit current (Isc)	А	11.66	11.76	11.87
Maximum power voltage (Vmpp)	V	38.74	38.97	39.16
Maximum power current (Impp)	А	10.85	10.91	10.99
Module efficiency	%	21.3	21.6	21.84

ELECTRICAL DATA - NMOT**		FU 420 M	FU 425 M	FU 430 M
Module power (Pmax)	W	316	320	324
Open circuit voltage (Voc)	V	44.00	44.1	44.20
Short circuit voltage (Isc)	А	9.41	9.49	9.57
Maximum power voltage (Vmpp)	V	36.2	36.40	36.60
Maximum power current (Impp)	А	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

PACKAGING INFORMATION

Quantity / Pallet	36 pcs
Container 40' HQ	900 pcs / 25 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



