

WRS-430-27 MHD FB

TOPCon Technology

POWER RANGE

410 W – 440W

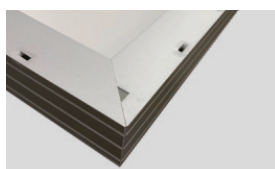
CELL SIZE

182 x 91 mm



JUNCTION BOX

Waterproof protection grade: IP68
Safety Level: Class II
Maximum System Voltage: 1500 V
Outstanding waterproof level
Effectively resist harsh environments

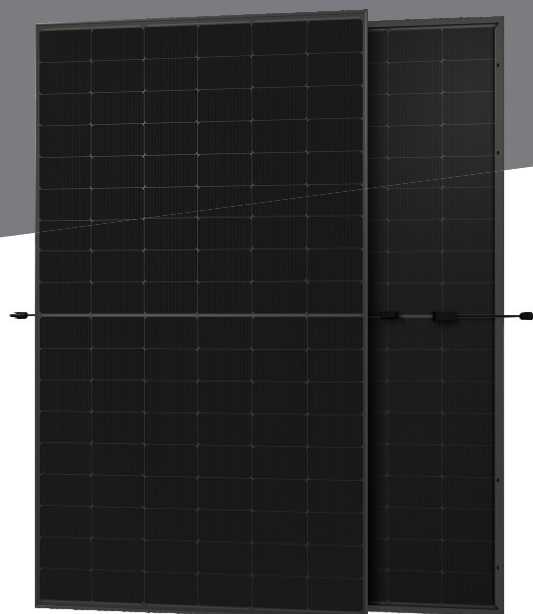


FRAME

Strong mechanical load
Resistance up to 5400 Pa
Anodic oxidation layer resistant to chemical corrosion available



16BB

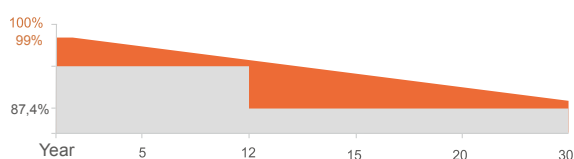


QUALIFICATIONS AND CERTIFICATES



IEC 61215 / IEC 61730

WARRANTY



12
YEARS

Guarantee on product material and workmanship

30
YEARS

Linear Power output warranty



SMBB Technology

Better light trapping and current collection to improve module power output and reliability.



PID Resistance

Excellent Anti-PID performance guarantee via optimized mass-production process and materials control.



Higher Power Output

Module power increases 5-25% generally, bringing significantly lower LCOE and higher IRR.



Enhanced Mechanical Load

Certified to withstand: wind load (2400 PA) and snow load (5400 PA).

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ELECTRICAL DATA (STC)

Model Type	WRS-410-27V-MHD FB	WRS-415-27V-MHD FB	WRS-420-27V-MHD FB	WRS-425-27V-MHD FB	WRS-430-27V-MHD FB	WRS-435-27V-MHD FB	WRS-440-27V-MHD FB
Peak Power (Pmax)	410.00 W	415.00 W	420.00 W	425.00 W	430.00 W	435.00 W	440.00 W
Maximum Power Voltage (Vmp)	31.33 V	31.52 V	31.71 V	31.90 V	32.08 V	32.26 V	32.44 V
Maximum Power Current (Imp)	13.09A	13.17 A	13.25A	13.32A	13.40 A	13.48A	13.56 A
Open Circuit Voltage (VOC)	37.93 V ± 3%	38.12 V ± 3%	38.31 V ± 3%	38.50 V ± 3%	38.69 V ± 3%	38.87 V ± 3%	39.05 V ± 3%
Short Circuit Current (ISC)	13.83 A ± 3%	13.91 A ± 3%	13.99 A ± 3%	14.06 A ± 3%	14.14 A ± 3%	14.21 A ± 3%	14.29 A ± 3%
Module Efficiency (%)	21.00 %	21.25 %	21.51 %	21.76 %	22.02 %	22.28 %	22.54 %

* STC: irradiance 1000 W/m², AM 1.5, and cell temperature of 25 °C

ELECTRICAL DATA (NMOT)

Model Type	WRS-410-27V-MHD FB	WRS-415-27V-MHD FB	WRS-420-27V-MHD FB	WRS-425-27V-MHD FB	WRS-430-27V-MHD FB	WRS-435-27V-MHD FB	WRS-440-27V-MHD FB
Peak Power (Pmax)	308.00 W	312.00 W	316.00 W	320.00 W	323.00 W	327.00 W	331.00 W
Maximum Power Voltage (Vmp)	29.37 V	29.55 V	29.73 V	29.91 V	30.08 V	30.25 V	30.42 V
Maximum Power Current (Imp)	10.50 A	10.56 A	10.63 A	10.68 A	10.75 A	10.81 A	10.88 A
Open Circuit Voltage (VOC)	36.03 V ± 3%	36.21 V ± 3%	36.39 V ± 3%	36.57 V ± 3%	36.75 V ± 3%	36.93 V ± 3%	37.11 V ± 3%
Short Circuit Current (ISC)	11.16 A ± 3%	11.23 A ± 3%	11.29 A ± 3%	11.35 A ± 3%	11.42 A ± 3%	11.49 A ± 3%	11.56 A ± 3%

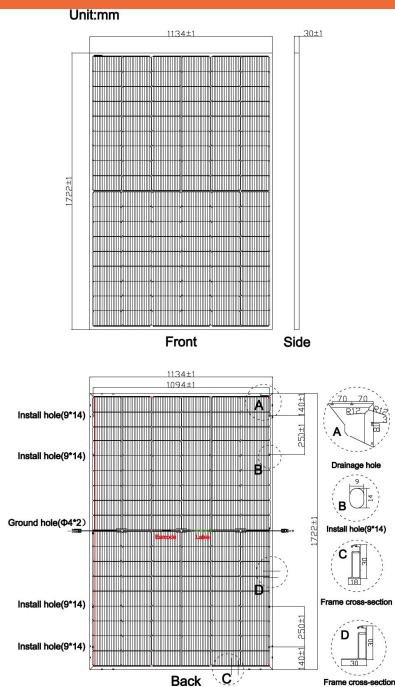
* NMOT: irradiance 800 W/m², AM 1.5, ambient temperature 20 °C, wind speed 1 m/s

ELECTRICAL DATA (BNPI)

Model Type	WRS-410-27V-MHD FB	WRS-415-27V-MHD FB	WRS-420-27V-MHD FB	WRS-425-27V-MHD FB	WRS-430-27V-MHD FB	WRS-435-27V-MHD FB	WRS-440-27V-MHD FB
Peak Power (Pmax)	454.00 W	460.00 W	465.00 W	471.00 W	476.00 W	482.00 W	488.00 W
Maximum Power Voltage (Vmp)	31.33 V	31.52 V	31.71 V	31.90 V	32.08 V	32.26 V	32.44 V
Maximum Power Current (Imp)	14.49 A	14.59 A	14.66 A	14.76 A	14.84 A	14.94 A	15.04 A
Open Circuit Voltage (VOC)	37.93 V ± 3%	38.12 V ± 3%	38.31 V ± 3%	38.50 V ± 3%	38.69 V ± 3%	38.87 V ± 3%	39.05 V ± 3%
Short Circuit Current (ISC)	15.30 A ± 3%	15.40 A ± 3%	15.47 A ± 3%	15.57 A ± 3%	15.65 A ± 3%	15.74 A ± 3%	15.83 A ± 3%

* BNPI: back irradiance 135W/m², AM1.5, and cell temperature of 25°C

PV DRAWINGS



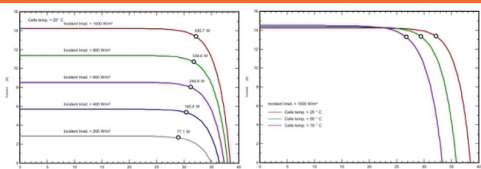
TEMPERATURE & MAXIMUM RATING

Maximum System Voltage (V)	1500 V
Maximum Series Fuse Rating (A)	30 A
Power Tolerance	0 - +3 W
Pmax Temperature Coefficients (W/°C)	-0.300 W % /°C
VOC Temperature Coefficients (V/°C)	-0.250 V % /°C
ISC Temperature Coefficients (A/°C)	+0.046 A % /°C
NMOT Nominal Module Operating Temperature (°C)	45 ± 2 °C
Operating and Storage Temperature (°C)	-40 - +85 °C

MECHANICAL CHARACTERISTICS

Cell Type	182 x 91 N-Type Bifacial Mono
No. of Cells	108 (12 x 9)
Dimension	1722 x 1134 x 30 mm
Weight	24.70 kg
Front Glass	2.0 mm AR coating tempered glass
Back Glass	2.0 mm Glazed Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68 3 diodes
Output Cables	4 mm² cable 1000mm (including MC4-connector)
Maximum Wind Load / Snow Load	2400 Pa / 5400 Pa

IV CURVE (430 W)



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