

# WRS-440-27 MH BF

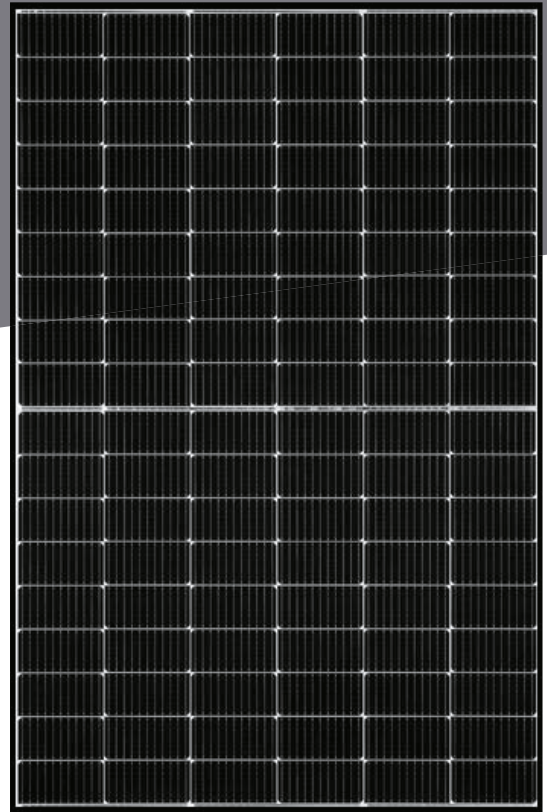
## TOPCon Technology

### POWER RANGE

410 W – 440 W

### CELL SIZE

182 x 91 mm

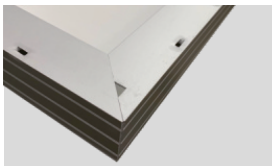


16BB



### JUNCTION BOX

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



### FRAME

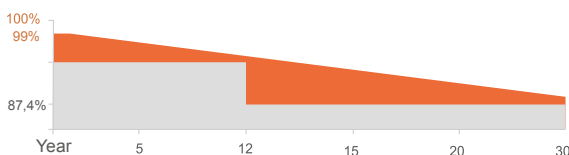
Strong mechanical load  
 Resistance up to 5400 Pa  
 Anodic oxidation layer resistant to chemical corrosion available

## QUALIFICATIONS AND CERTIFICATES



IEC 61215 / IEC 61730

## WARRANTY



**25 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.



### Durability Against Extreme Environmental Conditions

High salt mist and ammonia resistance.



### Enhanced Mechanical Load

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

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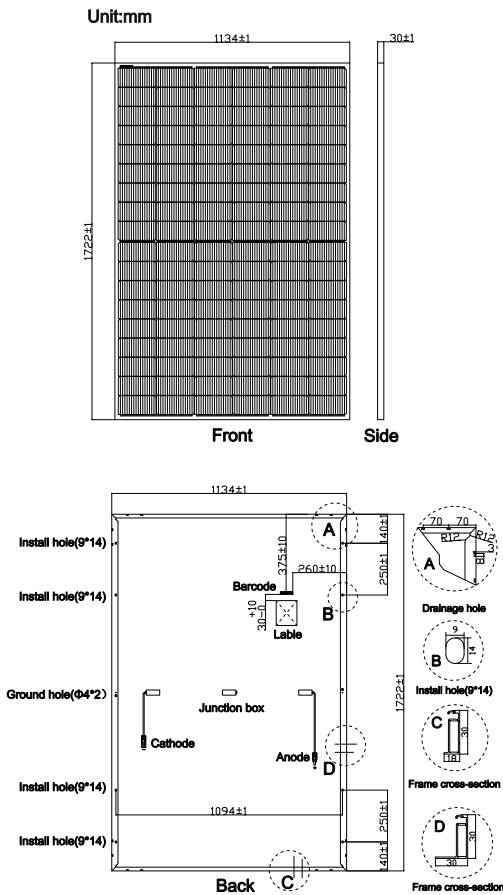
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### ELECTRICAL DATA (STC)

Model Type	WRS-410-27-MH BF	WRS-415-27-MH BF	WRS-420-27-MH BF	WRS-425-27-MH BF	WRS-430-27-MH BF	WRS-435-27-MH BF	WRS-440-27-MH BF
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)	31.13 V	31.32 V	31.51 V	31.70 V	31.88 V	32.07 V	32.26 V
Maximum Power Current (Imp)	13.17 A	13.25 A	13.33 A	13.41 A	13.49 A	13.57 A	13.64 A
Open Circuit Voltage (VOC)	37.73 V ± 3%	37.92 V ± 3%	38.11 V ± 3%	38.30 V ± 3%	38.49 V ± 3%	38.67 V ± 3%	38.85 V ± 3%
Short Circuit Current (ISC)	13.91 A ± 3%	13.99 A ± 3%	14.07 A ± 3%	14.15 A ± 3%	14.23 A ± 3%	14.31 A ± 3%	14.38 A ± 3%
Module Efficiency (%)	21.00 %	21.25 %	21.51 %	21.76 %	22.02 %	22.28 %	22.54 %

\* STC: irradiance 1000 W/m<sup>2</sup>, AM 1.5, and cell temperature of 25 °C

### PV DRAWINGS



### TEMPERATURE & MAXIMUM RATING

Maximum System Voltage (V)	1500 V
Maximum Series Fuse Rating (A)	25 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

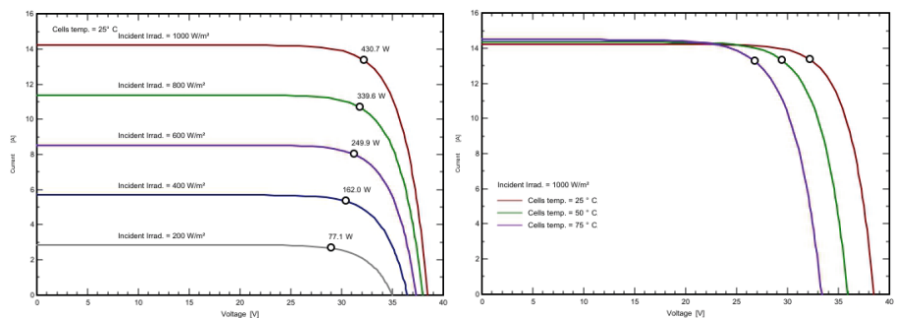
### MECHANICAL CHARACTERISTICS

Cell Type	182 x 91 N-Type Mono
No. of Cells	108 (12 x 09)
Dimension	1722 x 1134 x 30 mm
Weight	21.50 kg
Front Glass	3.2 mm high transmission, low iron, tempered glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68 3 diodes
Output Cables	4 mm <sup>2</sup> cable 1000 mm (including MC4 connector)
Maximum Wind Load / Snow Load	2400 Pa / 5400 Pa

### PACKING WAY

20" FT Container	6 Packages / 222 pcs
40" HQ Container	26 Packages / 962 pcs

### IV CURVE (430 W)



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