

# WRS-XXX-27MH SF

## Topcon Technology

### POWER RANGE

410W~440W

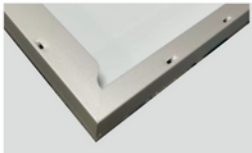
### CELL SIZE

182\*91mm



### JUNCTION BOX

Waterproof protection grade: IP67/IP68  
 Safety Class: Class II  
 Max Voltage: 1500V  
 Resistant to harsh environments and outstanding waterproofing.



### FRAME

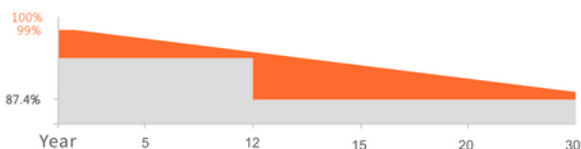
Strong mechanical load resistance up to 5400Pa  
 Anodic oxidation layer resistant to chemical corrosion  
 Available in silver and black.

## QUALIFICATIONS & CERTIFICATES



• IEC61215 / • IEC61730

## WARRANTY



- 20 YEARS** Guarantee on product material and workmanship
- 30 YEARS** Linear Power output warranty



16BB



### SMBB Technology

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



### PID Resistance

Excellent Anit-PID performance guaranteed via optimised mass production process & materials control.



### Durability Against Extreme Environmental Conditions

High salt mist and ammonia resistance.



### PID Resistant

Certified to withstand a wind load (2400 Pascal) and snow load (5400 Pascal).

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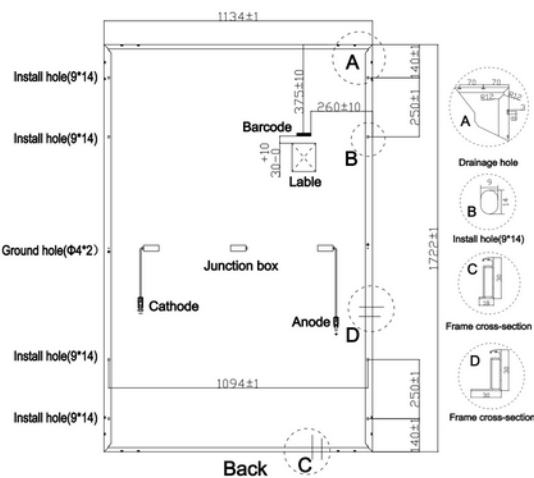
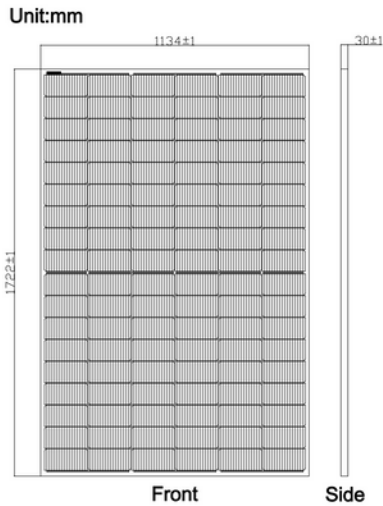
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## ELECTRICAL DATA (STC)

Model Type	WRS 410- 27MH SF	WRS 415- 27MH SF	WRS 420- 27MH SF	WRS 425- 27MH SF	WRS 430- 27MH SF	WRS 435- 27MH SF	WRS 440- 27MH SF
Peak Power (Pmax)	410.00	415.00	420.00	425.00	430.00	435.00	440.00
Maximum Power Voltage (Vmp)	31.13	31.32	31.51	31.70	31.88	32.07	32.26
Maximum Power Current (Imp)	13.17	13.25	13.33	13.41	13.49	13.57	13.64
Open Circuit Voltage (Voc)	37.73±3%	37.92±3%	38.11±3%	38.30±3%	38.49±3%	38.67±3%	38.85±3%
Short Circuit Current (Isc)	13.91±3%	13.99±3%	14.07±3%	14.15±3%	14.23±3%	14.31±3%	14.38±3%
Module Efficiency (%)	21.00	21.25	21.51	21.76	22.02	22.28	22.53

\* 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 %/°C
Voc Temperature Coefficient2s (V/°C)	-0.250 %/°C
Isc Temperature Coefficients (A/°C)	+0.046 %/°C
NOCT Nominal Operating Cell Temperature (°C)	45±2°C
Operating and Storage Temperature (°C)	-40~+85°C

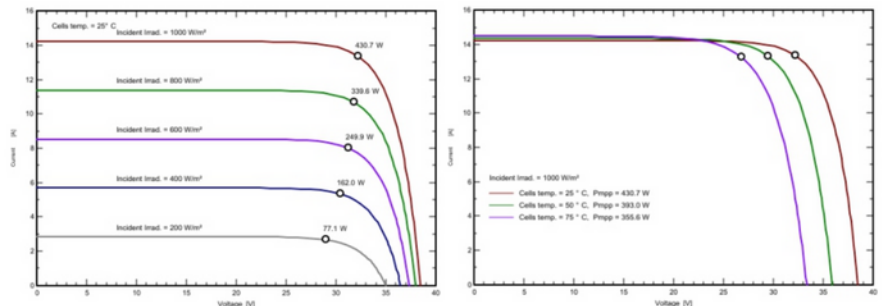
## MECHANICAL CHARACTERISTICS

Cell Type	182x91 N Type Mono
No. of Cells	108 (12x9)
Dimensions	1722X1134X30mm
Weight	21.50kg
Front Glass	3.2mm high transmission, low iron, tempered glass
Frame	Anodized Aluminium Alloy
Junction box	IP67/IP68 3diodes
Output cables	4mm <sup>2</sup> cable 35cm (Including MC4 connector)
MaxWind Load/Snow Load	2400Pa/5400Pa

## PACKING WAY

40HQ container | 26 Packages/ 962pcs

## IV CURVE



## WARIS ENERGY SRL

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