

WRS-650-39 MHD SF

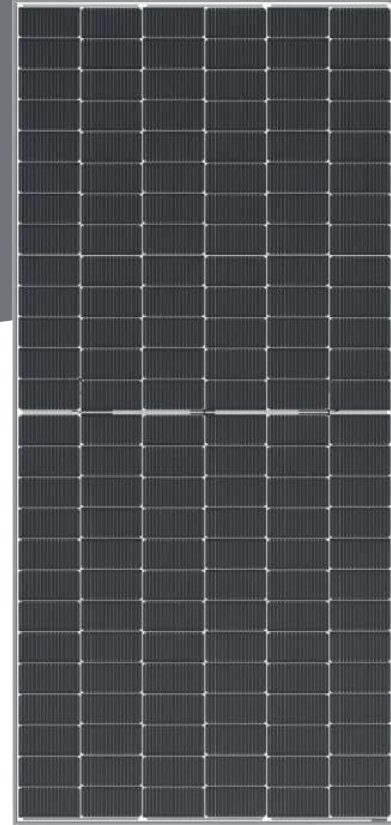
TOPCon Technology

POWER RANGE

625 W – 650 W

CELL SIZE

182 x 91 mm

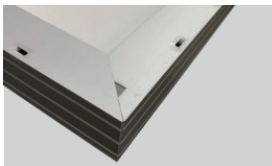


18BB



JUNCTION BOX

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



FRAME

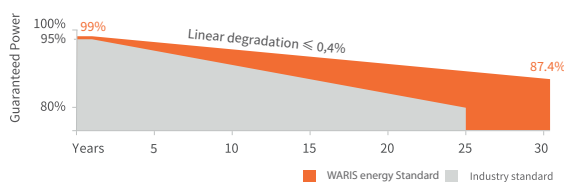
Strong mechanical load
Resistance up to 5400 Pa
Anodized aluminium alloy resistant to
chemical corrosion available
in silver and black

QUALIFICATIONS AND CERTIFICATES



- IEC 61215 / IEC 61730
- IEC 61701 / IEC 62804
- ISO 9001 : 2015 Quality Management System
- ISO 14001 : 2015 Environment Management System
- ISO 45001: 2018 Occupational Health and Safety Management System

WARRANTY



20 YEARS

Guarantee on product material and workmanship

30 YEARS

Linear Power output warranty



Multi Busbar Technology

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



Lower temperature coefficients

Enhance power generation



IP68 junction box

High waterproof level



Enhanced Mechanical Load

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



High customer value

Lower BOS cost and LCOE

WRS-650-39 MHD SF

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ELECTRICAL DATA (STC)

Performance at STC (Power Tolerance 0 - + 5W)

Model Type	WRS-625-39-MHD SF	WRS-630-39-MHD SF	WRS-635-39-MHD SF	WRS-640-39-MHD SF	WRS-645-39-MHD SF	WRS-650-39-MHD SF
Peak Power (Pmax)	625.00 W	630.00 W	635.00 W	640.00 W	645.00 W	650.00 W
Maximum Power Voltage (Vmp)	46.12 V	46.30 V	46.47 V	46.63 V	46.79 V	46.95 V
Maximum Power Current (Imp)	13.44 A	13.50 A	13.56 A	13.62 A	13.68 A	13.74 A
Open Circuit Voltage (VOC)	55.81 V	56.01 V	56.21 V	56.41 V	56.61 V	56.81 V
Short Circuit Current (ISC)	14.03 A	14.11 A	14.19 A	14.27 A	14.35 A	14.43 A
Module Efficiency (%)	22.18 %	22.36 %	22.54 %	22.72 %	22.90 %	23.07 %

* STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5

ELECTRICAL DATA (NOCT)

Model Type	WRS-625-39-MHD SF	WRS-630-39-MHD SF	WRS-635-39-MHD SF	WRS-640-39-MHD SF	WRS-645-39-MHD SF	WRS-650-39-MHD SF
Peak Power (Pmax)	466.20 W	470.00 W	473.80 W	477.60 W	484.40 W	485.20 W
Maximum Power Voltage (Vmp)	43.41 V	43.57 V	43.73 V	43.89 V	44.05 V	44.21 V
Maximum Power Current (Imp)	10.74 A	10.79 A	10.84 A	10.89 A	10.94 A	10.99 A
Open Circuit Voltage (VOC)	53.01 V	53.20 V	53.39 V	53.58 V	53.77 V	53.96 V
Short Circuit Current (ISC)	11.32 A	11.39 A	11.46 A	11.53 A	11.60 A	11.67 A

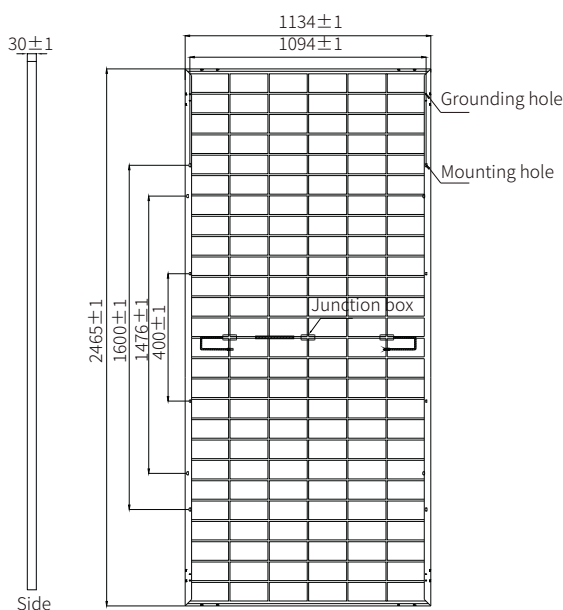
* NOCT: Irradiance 800W/m², Ambient Temperature 25°C, Wind Speed 1m/s

ELECTRICAL DATA (BNPI)

	5%	10%	15%	20%	25%
Pmax gain (%)	5%	10%	15%	20%	25%
Peak Power (Pmax)	677.30 W	709.50 W	741.80 W	774.00 W	806.30 W
Maximum Power Voltage (Vmp)	46.95 V	46.95 V	46.95 V	46.95 V	46.95 V
Maximum Power Current (Imp)	14.43 A	15.11 A	15.80 A	16.49 A	17.18 A

* BNPI: back irradiance 135W/m² AM 1.5 and cell temperature of 25°C

PV DRAWINGS



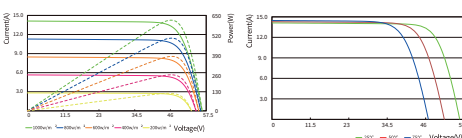
TEMPERATURE & MAXIMUM RATING

Maximum System Voltage (V)	1500 V
Operating and Storage Temperature (°C)	-40 - +85 °C
Maximum Series Fuse Rating (A)	25 A
Static Loading	5400 Pa
Connector	MC4 Compatible
Pmax Temperature Coefficients (W/°C)	-0.30% /°C
VOC Temperature Coefficients (V/°C)	-0.24% /°C
ISC Temperature Coefficients (A/°C)	+0.04% /°C
NOCT	41 ± 2 °C

MECHANICAL CHARACTERISTICS

No. of Cells	156 [2 x (13 x 6)]
Weight	34,7 kg
Dimension	2465 x 1134 x 30mm
Output Cables	4 mm ² cable 300 mm
Front Glass	2.0 mm High Transmission, Tempered Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68

IV CURVE (700 W)



PACKING WAY

40" HQ Container 36 Packages / 576 pcs



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