

# WRS-60P

## POWER RANGE

290W~320W

## CELL FEATURE

158.75\*158.75, 21.17%

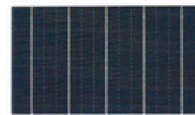


### JUNCTION BOX

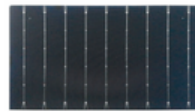
High waterproof rating  
Protection Degree: IP67  
Safety Class: Class II  
Rated Voltage: 1500V

### FRAME

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



5BB



9BB



### MBB CELLS

More uniform current collection reduces the current loss of the cell inside panels



### Anti-reflective glass

Increases the light absorption, and reduces the power loss caused by the self-cleaning in rain.



### Excellent performance in low irradiance

Enable solar panels to generate electricity in the morning, cloudy and rainy days.



### PID Resistant

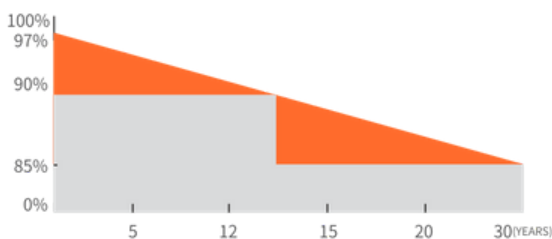
Perfect resistance against PID (Potential Induced Degradation) to secure your investment.

## QUALIFICATIONS AND CERTIFICATES



·IEC61215 / · IEC61730

## WARRANTY



12 YEARS

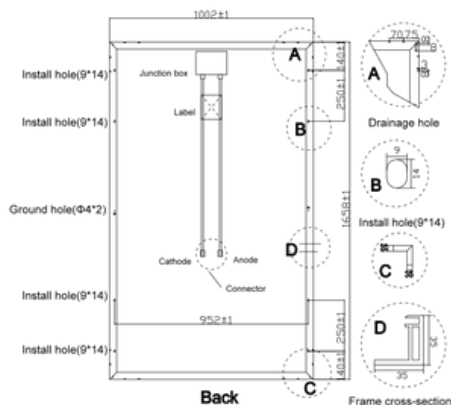
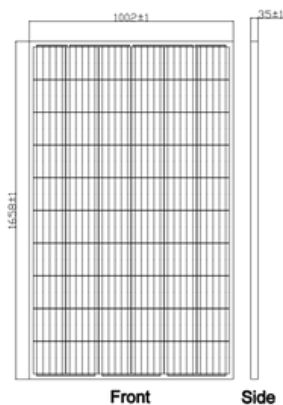
Guarantee on product material and workmanship

30 YEARS

Linear Power output warranty

## PV DRAWINGS

Unit:mm



## ELECTRICAL DATA (STC)

Model Type	WRS290-30-P	WRS300-30-P	WRS310-30-P	WRS320-30-P
Peak Power(Pmax)	290.00	300.00	310.00	320.00
Maximum Power Voltage(Vmp)	32.14	32.34	32.54	32.74
Maximum Power Current(Imp)	9.03	9.28	9.53	9.78
Open Circuit Voltage(Voc)	39.37	39.6	39.86	40.11
Short Circuit Current(Isc)	9.51	29.77	10.04	10.30
Cells Efficiency( % )	19.18	19.85	20.51	21.17
Module Efficiency( % )	17.45	18.05	18.65	19.26

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

## ELECTRICAL DATA (NOCT)

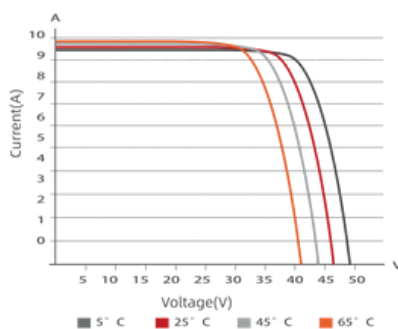
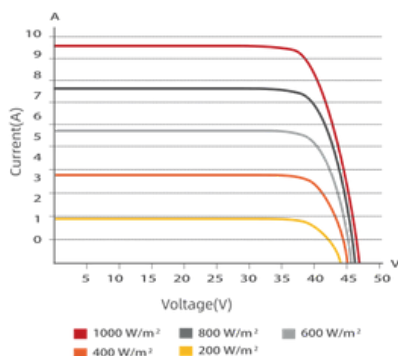
Model Type	WRS290-30-P	WRS300-30-P	WRS310-30-P	WRS320-30-P
Peak Power(Pmax)	215.00	223.00	230.00	238.00
Maximum Power Voltage(Vmp)	30.05	30.24	30.42	30.61
Maximum Power Current(Imp)	7.16	7.38	7.57	7.78
Open Circuit Voltage(Voc)	37.02	37.26	37.48	37.71
Short Circuit Current(Isc)	7.59	7.82	8.02	8.25

\* NOCT: irradiance 800 W/m<sup>2</sup>, AM 1.5, ambient temperature 20°C, wind speed 1 m/s

## TEMPERATURE & MAXIMUM RATING

Maximum System Voltage (V)	1500/1000
Maximum Series Fuse Rating (A)	20
Power Tolerance	0~+3 %
Pmax Temperature Coefficients (W/°C)	-0.400 %
Voc Temperature Coefficient2s (V/°C)	-0.300 %
Isc Temperature Coefficients (A/°C)	+0.060 %
NOCT Nominal Operating Cell Temperature (°C)	45±2
Operating and Storage Temperature (°C)	-40~+85

## IV CURVE



## MECHANICAL CHARACTERISTICS

Cell Type	158.75x158.75 Poly
No. of Cells	60 (6x10)
Dimensions	1658x1002x35mm
Weight	18.60kg
Front Glass	3.2mm high transmission, low iron, tempered glass
Frame	Anodized Aluminium Alloy
Junction box	IP65/IP67
Output cables	4mm <sup>2</sup> cable 90cm+mc4
MaxWind Load/Snow Load	2400Pa/5400Pa

## PACKING WAY

20FT container	14 Packages/400pcs
40HQ containe	28 Packages/924pcs

## WARIS ENERGY SRL

Italy- Via di Vittorio, 19, 38068, Rovereto (TN)  
 Germany- Im Speitel 9, 76229, Karlsruhe  
 Turkey- Mimarsinan OSB. 15. Can No:8, Melikgazi

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