

P-TYPE PERC TECHNOLOGY

WAAREE[®]
One with the Sun

WFLW – 490 to WFLW – 510

Flexible Module



Ultra
Light Weight



Higher Open
Circuit Voltage



Low Series
Resistance



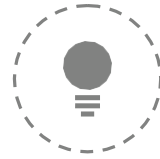
Easy & Quick to
Install



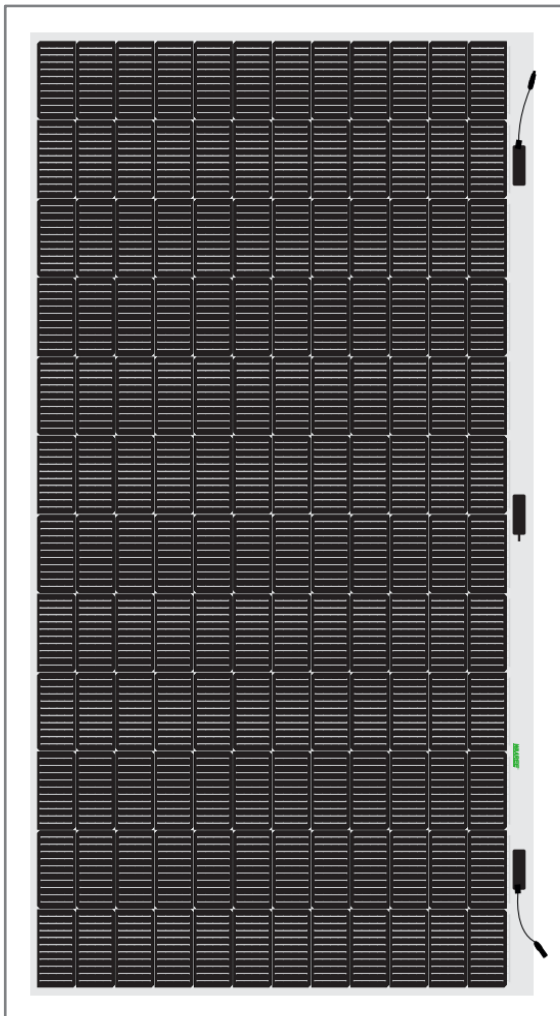
Easily Mounted
with Number of
Options



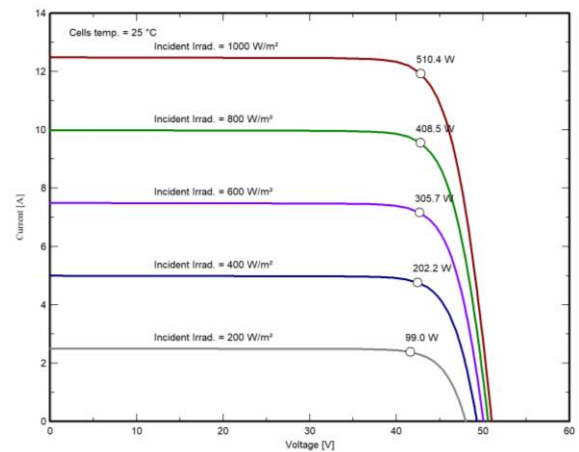
Low System
Installation Cost



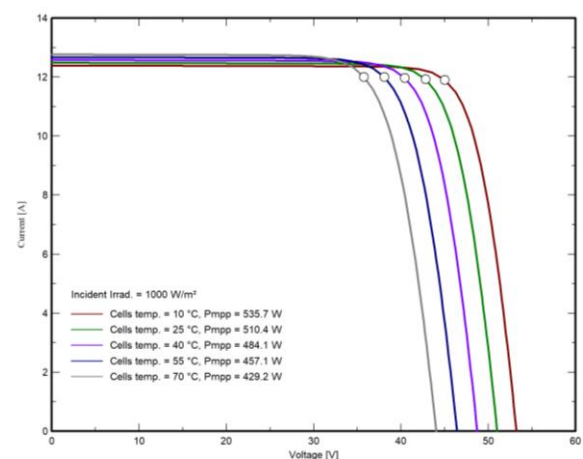
Superior Low Light &
Low Sun Angle
Performance



I-V VARIATION WITH IRRADIANCE



I-V VARIATION WITH TEMPERATURE



ISO 9001:2015 | ISO 14001:2015 | ISO 45001:2018
Independent assessment of factories by BLACK & VEATCH

www.waaree.com

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Flexible Module

ELECTRICAL CHARACTERISTICS

Models	P _{max} (W)	V _{mp} (V)	I _{mp} (A)	I _{sc} (A)	V _{oc} (V)	Active Area Eff. (%)	Module Eff. (%)
WFLW-490	490	41.90	11.70	12.30	48.96	20.55	18.15
WFLW-495	495	42.19	11.74	12.31	49.17	20.76	18.33
WFLW-500	500	42.48	11.77	12.35	49.39	20.96	18.50
WFLW-505	505	42.91	11.78	12.43	49.68	21.19	18.71
WFLW-510	510	43.06	11.85	12.48	49.89	21.39	18.87

*Standard Test Conditions (STC) - 1000 W/m² irradiance, Air Mass 1.5 and 25°C cell temperature. Power Tolerance: ±3%. Measuring Uncertainty ± 3%.

System Voltage	1500 V	Series Fuse Rating	25 A
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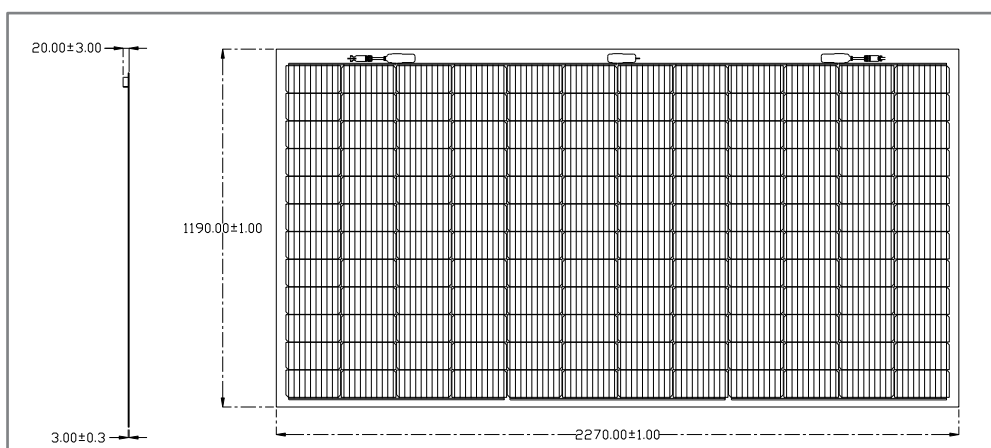
THERMAL CHARACTERISTICS

Temperature coefficient of Current (I _{sc}), α (%/°C)	+ 0.05
Temperature coefficient of Voltage (V _{oc}), β (%/°C)	- 0.25
Temperature coefficient of Power (P _m), γ (%/°C)	- 0.34
Operating temperature range (°C)	- 40 to 85

MECHANICAL CHARACTERISTICS

Length x Width x Thickness (L x W x T)	2270 mm (L) x 1190 mm (W) x 3 mm (T)
Weight	10.5 ± 0.5 kgs
Module thickness with Junction box (mm)	20 ± 0.3
Solar Cells per Module (Units) / Arrangement	144 cells / (12x6 12x6)
Solar Cell Type & Size	M10 P-type Mono PERC
Superstrate Type	ETFE Polymer
Encapsulate	PID free & UV Resistant
Junction Box (Protection degree)	IP68 rated
Connector Type	MC4 compatible
Cable cross - section	4 mm ²
Junction Box	Front Side

DESIGN SPECIFICATIONS



Waaree Energies Ltd. is a leading Renewable Energy Company which has India's largest Solar PV Modules and Cells manufacturing capacity of 15+ GW and 5.4 GW respectively. In addition, it is committed to provide top notch EPC services, Inverter Modules, Transformers, Smart Energy Meters, Green Hydrogen, Energy Storage Solutions and also is an Independent Power Producer. Waaree is committed towards Accelerating the Global Energy Transition.

5 Years Product Warranty* • **15 Years Power Output Warranty***

*For Non-Roofing 2 Years of workmanship and 5 Years on Power output • For roofing 5 Years of workmanship and 15 Years on Power Output

- The electrical data given here is for reference purpose only.
- Please confirm your exact requirements with the sales representative while placing your order.
- Refer installation Manual instructions & Waaree warranty statement for terms & conditions.
- Waaree Reserves the right to change the specifications without prior notice.