

BIPV MODULE

WSM-390 to WSM-400

WAAREE®

One with the Sun



Maintained illumination level of building



Controlled thermal gain thus lowering heating/cooling requirement



Active noise cancellation



Ideal PV module for green building applications



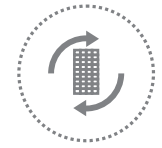
PID resistant module ensuring long term reliability



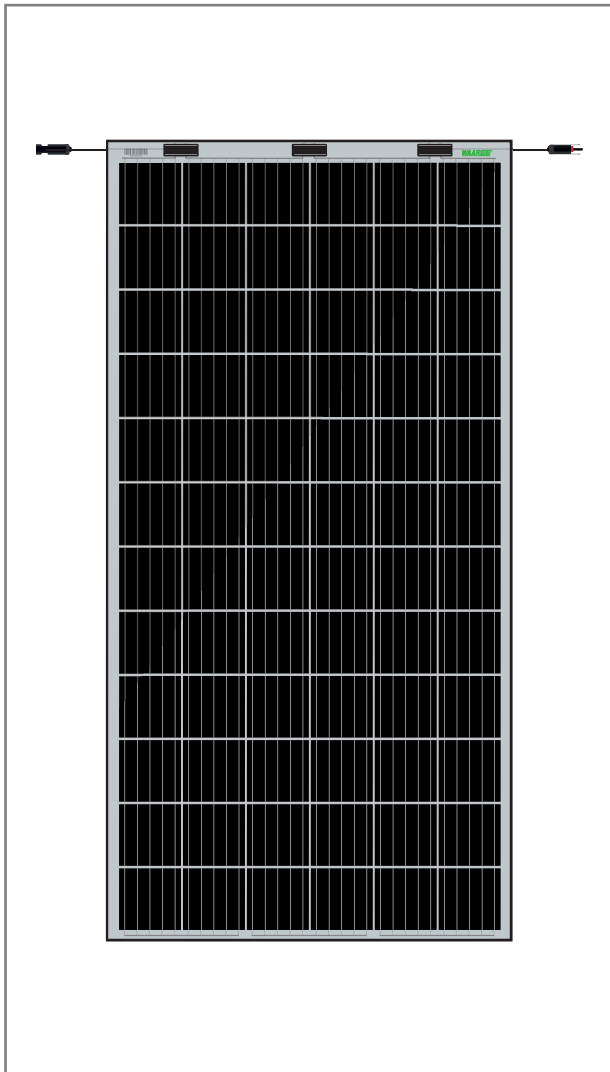
Sustain heavy wind & snow loads (2400 pa & 5400 pa)



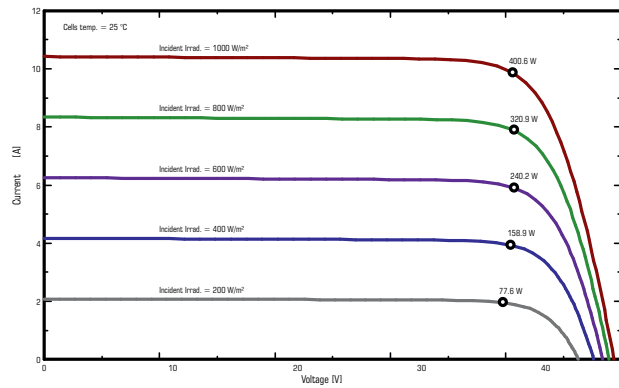
System voltage: 1500VDC to reduce the BOS cost



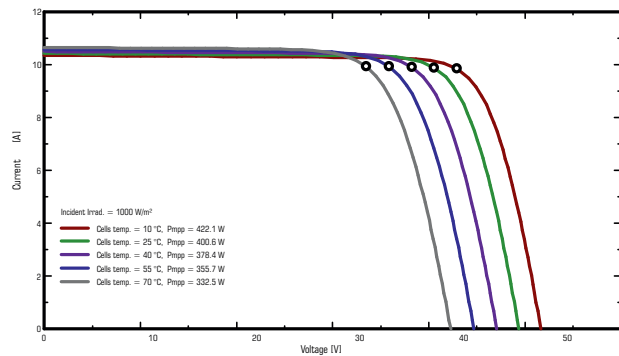
Glass with Anti Reflective Coating Improves light transmission



I-V VARIATION WITH IRRADIANCE



I-V VARIATION WITH TEMPERATURE



The Graphs are for reference purpose only. Please consult Waaree technical team for further clarifications.

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ELECTRICAL CHARACTERISTICS

Models	P _{max} (W)		V _{mp} (V)		I _{mp} (A)		I _{sc} (A)		V _{oc} (V)		Module Eff. (%)
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	
WSM-390	390	288.2	40.10	37.47	9.73	7.69	10.03	8.11	48.85	44.99	19.50
WSM-395	395	291.6	40.28	37.60	9.81	7.75	10.12	8.18	49.05	45.18	19.75
WSM-400	400	295.3	40.50	37.83	9.88	7.81	10.18	8.23	49.25	45.36	20.01

*Standard Test Conditions (STC) - 1000 W/m² irradiance, Air Mass 1.5 and 25°C cell temperature. Nominal Operating Cell Temperature (NOCT) - 800 W/m² irradiance, Air Mass 1.5, Ambient temperature 20°C and Wind speed 1 m/s. Average power reduction of 4.5% at 200 W/m² as per IEC 60904-1. Measuring Uncertainty ± 3%.

System Voltage	1500 V	Series Fuse Rating	22 A
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MECHANICAL CHARACTERISTICS

Length x Width x Thickness (LxWxT)	2002 mm (L) x 998.5 mm (W) x 22 mm (T)
Weight	52 kgs
Solar Cells per Module (Units)/Arrangement	72 cells / (12x6)
Solar Cell Type & Size	Mono PERC, 158.75 x 158.75 mm
Front Glass	Low Iron and Tempered glass
Encapsulate	PID Free & UV Resistant
Junction Box (Protection degree/Material)	IP68 / Weatherproof PPO
Cable & Connector (Protection degree/Type)	IP68 rated / MC4 compatible
Cable cross - section & Length	4 mm ² & 500mm

THERMAL CHARACTERISTICS

Temperature coefficient of Current (I _{sc}), α (%/°C)	0.05
Temperature coefficient of Voltage (V _{oc}), β (%/°C)	-0.27
Temperature coefficient of Power (P _m), γ (%/°C)	-0.37
NOCT (°C)	46 ± 2
Operating temperature range (°C)	-40 to 85

Waaree Energies Ltd. is amongst the top Solar Energy Companies and has the country's largest Solar PV Module manufacturing capacity of 2 GW. In addition, it is committed to provide top notch EPC services, project development, rooftop solutions, solar water pumps and also in an Independent Power Producer. Waaree has its presence in over 325+ locations nationally and 68 countries globally.

*If you need specific product certificates, and if module installations are to deviate from our guidance specified in our installation manual, please contact your local Waaree sales and technical representatives.

- 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.

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