# ELITE SERIES N-TYPE

# WSMT-680 to WSMT-715

# Framed Glass White Backsheet module





Highest reliability & enhanced crack tolerance MBB module



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



Best in class thermal coefficients



Highest commercial gains, lower LCOE



Better weak light performance



Excellent PID resistance

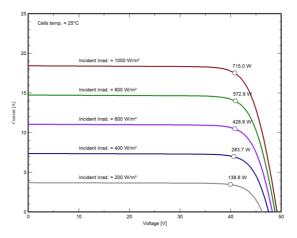




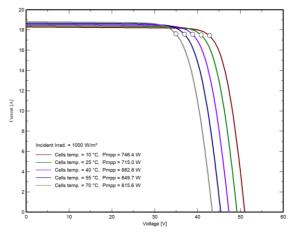


IEC 61215, IEC 61730 UL 61730-1, UL 61730-2

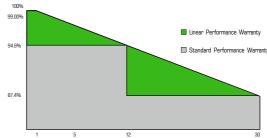
# I-V VARIATION WITH IRRADIANCE



# 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**

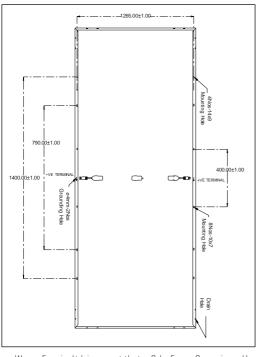
Models	Pmax (W)		Vmp (V)		Imp (A)		Isc (A)		Voc (V)		Module Eff. (%)
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	iviodule Ell. (90)
WSMT-680	680	515.40	39.67	36.98	17.14	13.81	18.16	14.64	47.78	45.39	21.89
WSMT-685	685	519.20	39.87	37.16	17.18	13.85	18.20	14.67	47.98	45.58	22.05
WSMT-690	690	523.00	40.09	37.37	17.21	13.87	18.23	14.69	48.18	45.77	22.21
WSMT-695	695	526.80	40.29	37.55	17.25	13.90	18.27	14.73	48.38	45.96	22.37
WSMT-700	700	530.60	40.49	37.73	17.29	13.94	18.31	14.76	48.58	46.15	22.53
WSMT-705	705	534.40	40.68	37.91	17.33	13.97	18.36	14.80	48.77	46.33	22.70
WSMT-710	710	538.20	40.90	38.12	17.36	13.99	18.39	14.82	48.97	46.52	22.86
WSMT-715	715	542.00	41.12	38.32	17.39	14.02	18.42	14.85	49.17	46.71	23.02

\*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%.

#### THERMAL CHARACTERISTICS

Temperature coefficient of Current (Isc), $\alpha$ (%/°C)	0.046
Temperature coefficient of Voltage (Voc), B (%/°C)	-0.26
Temperature coefficient of Power (Pm), γ (%/°C)	-0.30
NOCT (°C)	43 ± 2
Operating temperature range (°C)	-40 to 85

# **DESIGN** SPECIFICATIONS



# **MECHANICAL CHARACTERISTICS**

Length x Width x Thickness (L x W x T)	2384 mm (L) x 1303 mm (W) x 35 mm (T)				
Weight	34.5 kgs				
Solar Cells per Module (Units) / Arrangement	132 cells / (11x6     11x6)				
Solar Cell Type & Size	G12 N-typeTOPCon Bifacial				
Front Glass (Material / Thickness)	3.2 mm Low Iron HTAR Tempered glass				
Encapsulate	PID Free & UV Resistant				
Junction Box (Protection degree / Material )	IP68 / Weatherproof PP0				
Cable & Connector (Protection degree / Type)	IP68 rated / MC4 compatible				
Cable cross - section & Length	4 mm² & 500mm				
Frame	Anodized Aluminium Alloy				

Waaree Energies Ltd. is amongst the top Solar Energy Companies and has the country's largest Solar PV Module manufacturing capacity of 12 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 350+ locations nationally and 68 countries globally.

12 Years Product Warranty • 30 Years Power Output Warranty

- 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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