

ELITE SERIES

N-TYPE

TopCon BI- 680-715W

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



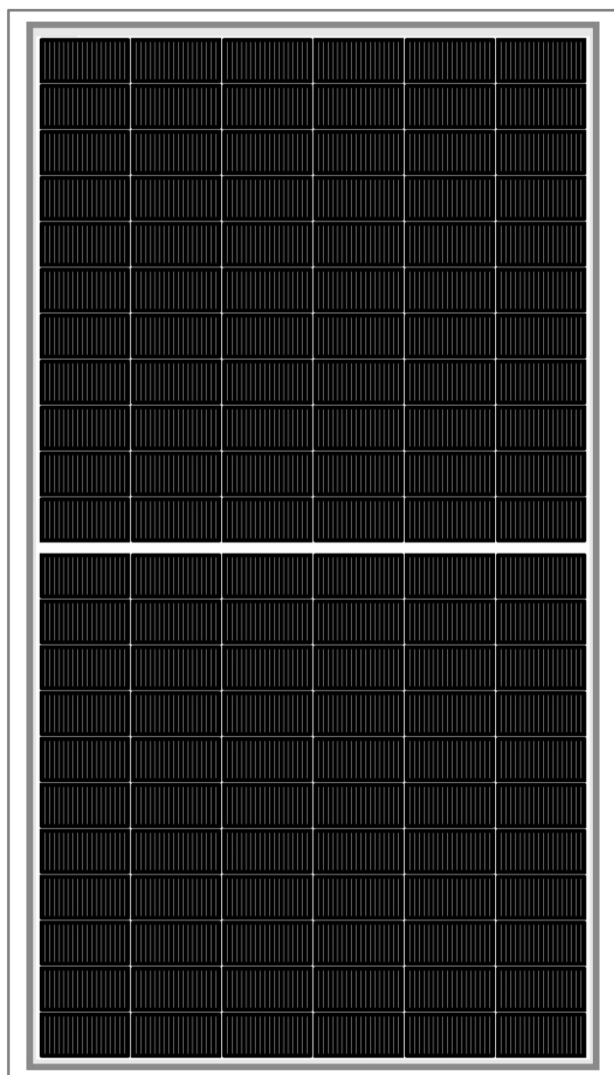
Highest commercial gains, lower LCOE



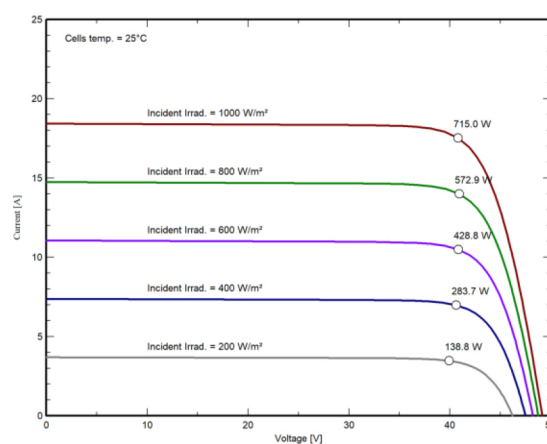
Better weak light performance



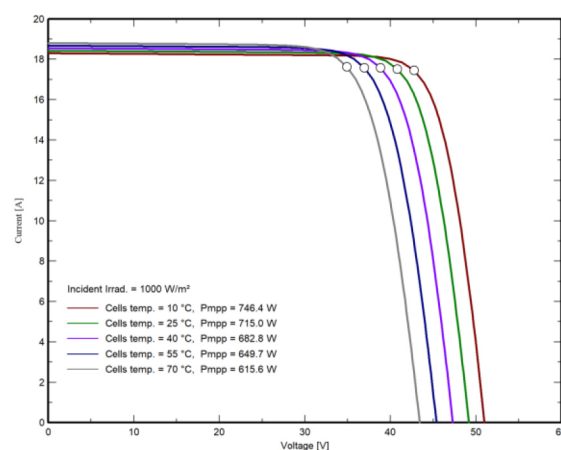
Excellent PID resistance



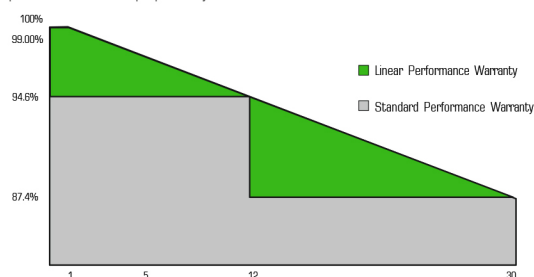
I-V VARIATION WITH IRRADIANCE



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	
TopCon BI -680	680	515.40	39.67	36.98	17.14	13.81	18.16	14.64	47.78	45.39	21.89
TopCon BI -685	685	519.20	39.87	37.16	17.18	13.85	18.20	14.67	47.98	45.58	22.05
TopCon BI -690	690	523.00	40.09	37.37	17.21	13.87	18.23	14.69	48.18	45.77	22.21
TopCon BI -695	695	526.80	40.29	37.55	17.25	13.90	18.27	14.73	48.38	45.96	22.37
TopCon BI -700	700	530.60	40.49	37.73	17.29	13.94	18.31	14.76	48.58	46.15	22.53
TopCon BI -705	705	534.40	40.68	37.91	17.33	13.97	18.36	14.80	48.77	46.33	22.70
TopCon BI -710	710	538.20	40.90	38.12	17.36	13.99	18.39	14.82	48.97	46.52	22.86
TopCon BI -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%.

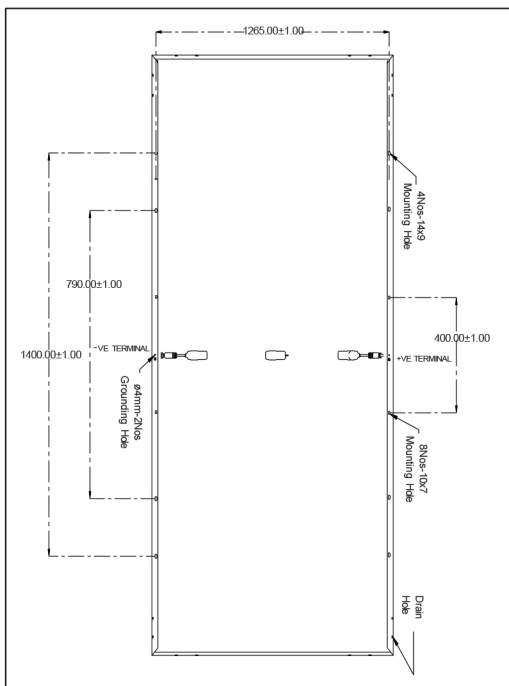
System Voltage	1500 V
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Series Fuse Rating	35 A
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THERMAL CHARACTERISTICS

Temperature coefficient of Current (Isc), α (%/°C)	0.046
Temperature coefficient of Voltage (Voc), β (%/°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 PPO
Cable & Connector (Protection degree / Type)	IP68 rated / MC4 compatible
Cable cross - section & Length	4 mm ² & 500mm
Frame	Anodized Aluminium Alloy

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 & MELANA warranty statement for terms & conditions.
- MELANA Reserves the right to change the specifications without prior notice.