

IS 14286 : 2010/IEC 61215 : 2005,
IS/IEC 61730 (PART 1) : 2004 &
IS/IEC 61730 (PART 2) : 2004



R-72012360

onix

N-TYPE TOPCON 16BB 580 Wp – 590 Wp

BIFACIAL (GLASS TO GLASS)



30
YEARS



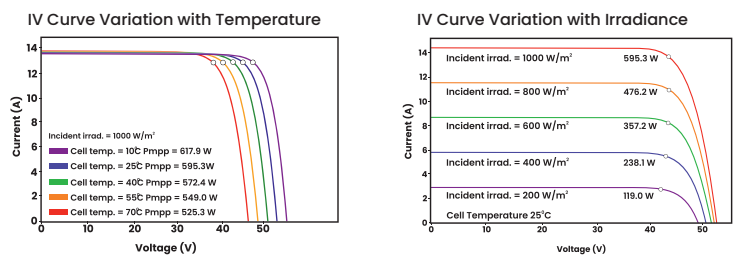
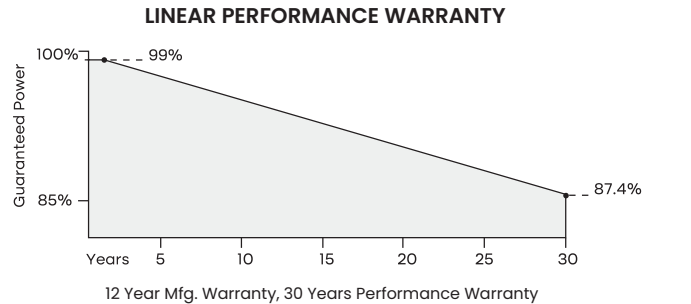
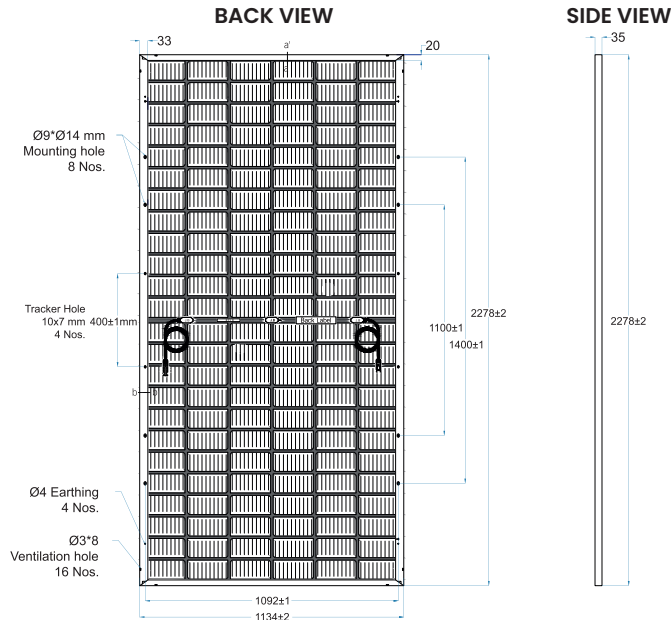
Warranty
for Linear
Performance*

12
YEARS



Product Warranty
on Materials and
Workmanship*

ELECTRICAL CHARACTERISTICS*	OTRPLT16B144-580		OTRPLT16B144-585		OTRPLT16B144-590		OTRPLT16B144-595		OTRPLT16B156-600	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Nominal Maximum Power (Pmax)	580	435	585	439	590	443	595	443	600	446
Optimum Operating Voltage (Vmp)	44.75	42.03	44.94	42.2	45.12	42.37	44.90	41.34	47.66	43.88
Optimum Operating Current (Imp)	12.97	10.35	13.02	10.41	13.08	10.45	13.26	10.71	12.59	10.17
Open Circuit Voltage (Voc)	52.80	49.79	53.01	49.98	53.21	50.18	52.20	48.07	55.41	51.02
Short Circuit Current (Isc)	13.65	11.00	13.71	11.04	13.76	11.09	14.20	11.47	13.47	10.88
Module Efficiency	22.47%		22.67%		22.86%		23.05%		21.47%	



IV Curves for Front-Side Illumination of 595 Wp Panel

BIFACIAL OUTPUT - BACKSIDE POWER GAIN @ STC* [BIFACIALITY FACTOR: 80% ± 10%]

[Note: The bifacial gain depends on the power plant design and site conditions. Electrical component ratings should be selected as per actual Bifacial gain at site (module currents indicated below)]

		599	604	609	614	620	625
5%	Capacity Rating - Pmax(Wp)	599	604	609	614	620	625
	Rated Voltage - Vmp(V)	44.25	44.38	44.51	44.64	44.77	44.90
	Rated Current - Imp(A)	13.53	13.61	13.68	13.77	13.84	13.92
	Open Circuit Voltage - Voc(V)	51.55	51.68	51.81	51.94	52.07	52.20
	Short Circuit Current - Isc(A)	14.54	14.62	14.69	14.76	14.84	14.91
	Module Efficiency (%)	23.18%	23.38%	23.58%	23.79%	23.98%	24.20%
10%	Capacity Rating - Pmax(Wp)	627	633	638	644	649	655
	Rated Voltage - Vmp(V)	44.25	44.38	44.51	44.64	44.77	44.90
	Rated Current - Imp(A)	14.18	14.26	14.34	14.42	14.50	14.59
	Open Circuit Voltage - Voc(V)	51.55	51.68	51.81	51.94	52.07	52.20
	Short Circuit Current - Isc(A)	15.24	15.31	15.39	15.47	15.54	15.62
	Module Efficiency (%)	24.29%	24.49%	24.70%	24.92%	25.13%	25.35%

MECHANICAL SPECIFICATIONS

- Dimensions : 2278(L) x 1134(W) X 35(T)
- Weight(kg) : 28kg
- Cell type / NO of Cell : 144 Half-cut N-type TOPCon Bifacial Solar cells
- Frame : Anodized Aluminum Alloy (6005, Temper T6, Silver colour)
- Front Cover : Low Iron semi-Tempered AR coated Glass (2 mm thick)
- Encapsulate : PID Resistant and UV Resistant Polymeric Film
- Back Cover : 2.0 mm Low Iron Printed Semi Tempered Glass
- Junction Box : 30A Split Junction Box (3 nos. with Individual Bypass Diode) – Weatherproof (IP68)
- Bypass Diode : 60 A, 45 V, 200 °c max. Junction Temperature
- Cable : 4 sq. mm, 300 mm length (Customised Cable Length available on Request)
- Connectors : Mc4 Type
- Application Class Rating : Class A
- Safety Class Rating : Class II
- Mechanical Load Test : 5400 Pa-Front; 2400 Pa-Back (as per IEC & UL)

MAXIMUM OPERATING CONDITIONS

- Operating Temperature : -40°C to +85°C
- Maximum System Voltage : 1500V
- Maximum Series Fuse Rating : 30 A

TEMPERATURE COEFFICIENTS

- Current α (Isc) : 0.0471%/°C
- Voltage β (Voc) : -0.3021%/°C
- Power γ (Pmax) : -0.3315%/°C

PACKING STANDARD

	19FT	20FT	40FT
No. of Modules per Container	248	310	682
No. of Pallets per Container	08	10	22
No. of Modules per Pallet/Weight:	31 Nos./868 Kg		
Pallet Dimensions in mm:	2290(L)*1105(W)*142(H)		

ELECTRICAL PERFORMANCE [Note: Power tolerance: 0 ~ +4.99 W. Power measurement uncertainty: < ±3% Average value of NOCT: 45.00 ± 2 °C]

Caution: Please read safety and installation instructions before using the product. *Warranty: Linear performance warranty for 30 years, with degradation up to 1% in 1st year and 0.4%/year from year 2 to year 30. Please read ONIX warranty documents thoroughly. Disclaimer: Specifications included in the datasheet are subject to change without prior notice owing to continuous innovation in the Product Development and R&D Activities. ONIX-TECH RENEWABLE PVT. LTD. reserves the right to make any adjustment to the information described here.

Dataset contained in this specification do not form a representative of a single module data. @T&C Apply.