

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 600 Wp - 640 Wp

BIFACIAL (GLASS TO GLASS)



30
YEARS



Warranty
for Linear
Performance*

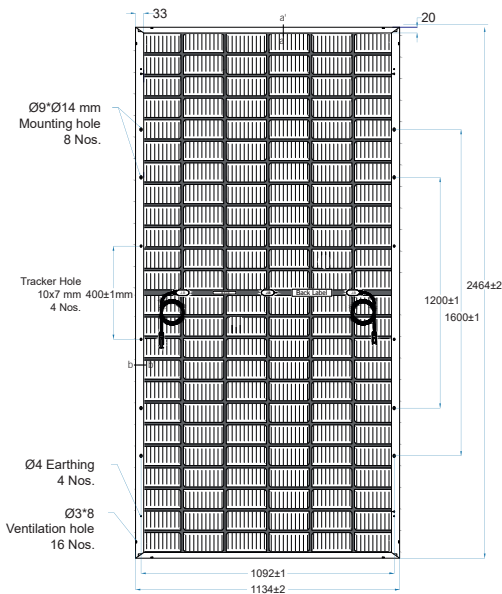
12
YEARS



Product Warranty
on Materials and
Workmanship*

ELECTRICAL CHARACTERISTICS*	OTRPLT16B156-600		OTRPLT16B156-605		OTRPLT16B156-610		OTRPLT16B156-615		OTRPLT16B156-620		OTRPLT16B156-625		OTRPLT16B156-630		OTRPLT16B156-635		OTRPLT16B156-640	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Nominal Maximum Power (Pmax)	600	446	605	449	610	453	615	457	620	461	625	464	630	468	635	472	640	476
Optimum Operating Voltage (Vmp)	47.66	43.88	47.79	44.00	47.92	44.12	48.05	44.24	48.18	44.36	48.31	44.48	48.44	44.60	48.57	44.72	48.70	44.84
Optimum Operating Current (Imp)	12.59	10.17	12.66	10.22	12.73	10.28	12.80	10.34	12.87	10.39	12.94	10.45	13.01	10.51	13.08	10.56	13.15	10.62
Open Circuit Voltage (Voc)	55.41	51.02	55.54	51.14	55.67	51.26	55.80	51.38	55.93	51.50	56.06	51.62	56.19	51.74	56.32	51.86	56.45	51.98
Short Circuit Current (Isc)	13.47	10.88	13.54	10.93	13.61	10.99	13.68	11.05	13.75	11.10	13.82	11.16	13.89	11.22	13.96	11.27	14.03	11.33
Module Efficiency	21.47%		21.65%		21.83%		22.01%	22.19%	22.19%		22.37%		22.55%		22.74%		22.92%	

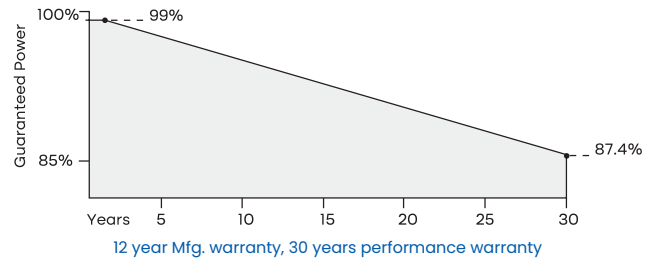
BACK VIEW



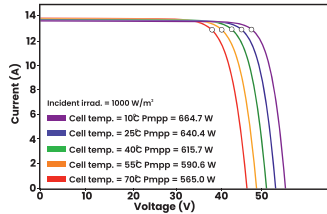
SIDE VIEW



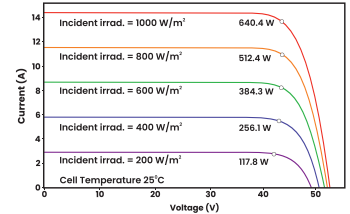
LINEAR PERFORMANCE WARRANTY



IV Curve Variation with Temperature



IV Curve Variation with Irradiance



IV Curves for Front-side Illumination of 640 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)]

Capacity Rating - Pmax(Wp)	630.04	635.27	640.52	645.79	651.08	656.39	661.71	667.06	672.43
Rated Voltage - Vmp(V)	47.66	47.79	47.92	48.05	48.18	48.31	48.44	48.57	48.70
Rated Current - Imp(A)	13.22	13.29	13.37	13.44	13.51	13.59	13.66	13.73	13.81
Open Circuit Voltage - Voc(V)	55.41	55.54	55.67	55.80	55.93	56.06	56.19	56.32	56.45
Short Circuit Current - Isc(A)	14.14	14.22	14.29	14.36	14.44	14.51	14.58	14.66	14.73
Module Efficiency (%)	22.55%	22.74%	22.92%	23.11%	23.30%	23.49%	23.68%	23.87%	24.07%

Capacity Rating - Pmax(Wp)	660.04	665.52	671.02	676.54	682.08	687.64	693.22	698.83	704.45
Rated Voltage - Vmp(V)	47.66	47.79	47.92	48.05	48.18	48.31	48.44	48.57	48.70
Rated Current - Imp(A)	13.85	13.93	14.00	14.08	14.16	14.23	14.31	14.39	14.47
Open Circuit Voltage - Voc(V)	55.41	55.54	55.67	55.80	55.93	56.06	56.19	56.32	56.45
Short Circuit Current - Isc(A)	14.82	14.89	14.97	15.05	15.13	15.20	15.28	15.36	15.43
Module Efficiency (%)	23.62%	23.82%	24.02%	24.21%	24.41%	24.61%	24.81%	25.01%	25.21%

MECHANICAL SPECIFICATIONS

Dimensions	: 2464(L) x 1134(W) x 35(T)
Weight(kg)	: 32kg
Cell Type / No of Cell	: 156 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	248	496
No. of Pallets per Container	08	08	16
No. of Modules per Pallet/Weight:	31 Nos./992 Kg		
Pallet Dimensions in mm:	2480(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.