



NiRSUN

SERIES

N-TYPE TOPCON 16BB

600 Wp - 640 Wp

BIFACIAL (GLASS TO BACK SHEET)



12 Years Product Warranty
On Materials And Workmanship*



30 Years Warranty for
Linear Performance*



Extra Power/High Saving



Extra Life With Up to 30% Additional Power



Double-Sided
Power Generation



Excellent anti-LeTID
& anti-PID performance



Lower temperature
coefficient



Lower LCOE
& system cost



PRODUCT | CERTIFICATES

IS 14286, IEC: 61215, 61730-1 & 11, 62804, 61583, 61701, 62716

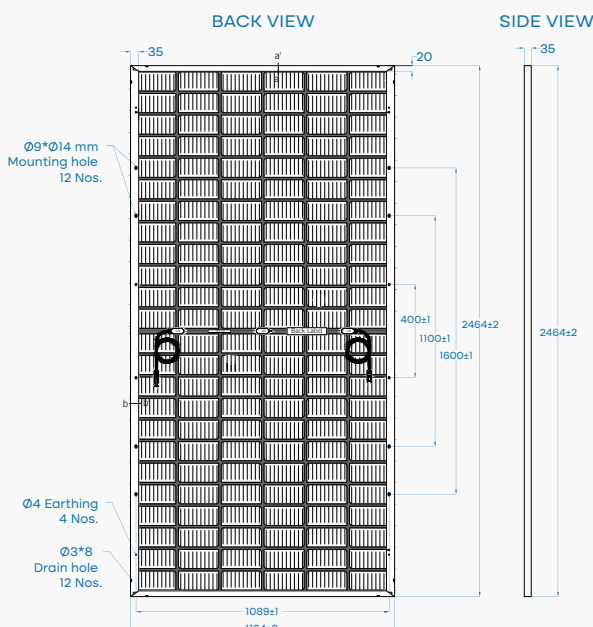
Quality Management System: ISO 9001:2015

Environment Management System: ISO 14001: 2015

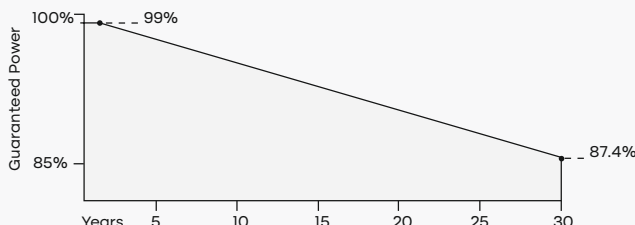
Occupational Health and Safety: ISO 45001:2018



ELECTRICAL CHARACTERISTICS*	SEPLT16BI56-600		SEPLT16BI56-605		SEPLT16BI56-610		SEPLT16BI56-615		SEPLT16BI56-620		SEPLT16BI56-625		SEPLT16BI56-630		SEPLT16BI56-635		SEPLT16BI56-640	
	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%	

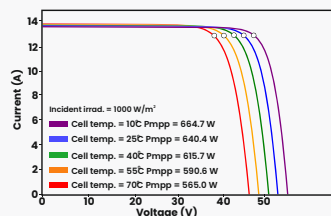


LINEAR PERFORMANCE WARRANTY

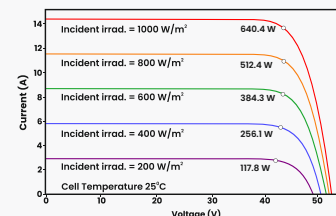


12 Year Mfg. Warranty, 30 Years Performance Warranty

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)]

5%	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%
10%	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)	31.5 kg
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 (3.2 mm thick)
Encapsulate	PID resistant and UV resistant Polymeric Film
Back Cover	PVDF base UV protected backsheet
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)
Mounting Holes Pitch (Y)-mm	[A] 1880, [B] 1140, (Holes at 400 mm Y-pitch for tracker can be provided on customer request)
Mounting Holes Pitch (X)-mm	1089

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	616
No. of Pallets per Container:	08	08	16
No. of Modules per Pallet/Weight:	31 Nos/950 Kg		
Pallet Dimensions in mm :	2480(L)*1000(W)*1230(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 SUNBOND 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. SUNBOND ENERGY 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.