

MADE
IN
INDIA



NiRSUN

SERIES



12
YEARS

12 Years Product
Warranty
On Materials And
Workmanship*

25
YEARS

25 Years Warranty
for Linear
Performance*

N-TYPE TOPCON 16BB - M10R

570 Wp - 595 Wp

BIFACIAL(GLASS TO BACK SHEET)



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

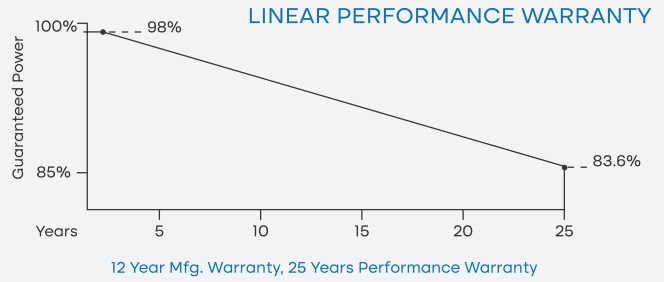
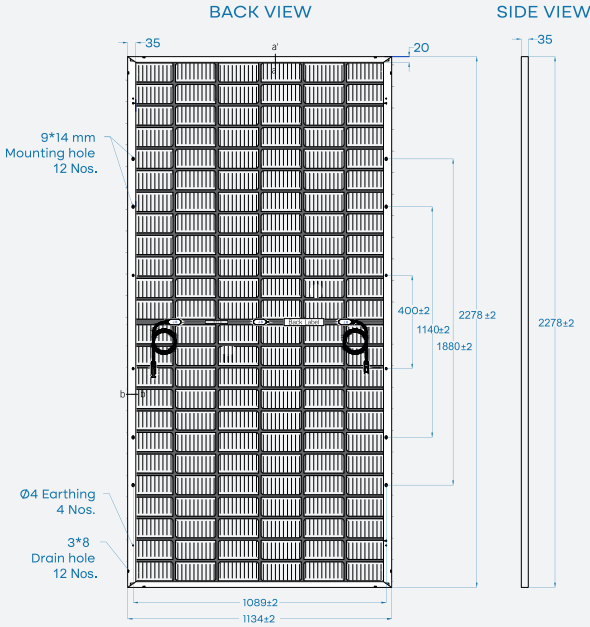


PRODUCT | CERTIFICATES

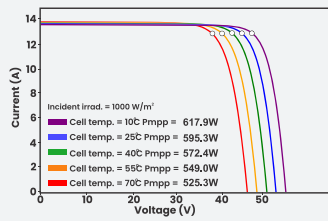
IS 14286, IEC: 61215, 61730-1 & 11, 62804, 61853, 61701, 62716
Quality Management System: ISO 9001:2015
Environment Management System: ISO 14001: 2015
Occupational Health and Safety: ISO 45001:2018

TECHNICAL DATA

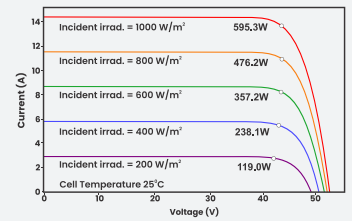
ELECTRICAL CHARACTERISTICS*	SEPLT16B144-570		SEPLT16B144-575		SEPLT16B144-580		SEPLT16B144-585		SEPLT16B144-590		SEPLT16B144-595	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Nominal Maximum Power - Pmax(Wp)	570	424	575	428	580	431	585	435	590	439	595	443
Optimum Operating Voltage- Vmp(V dc)	44.25	40.74	44.38	40.86	44.51	40.98	44.64	41.10	44.77	41.22	44.90	41.34
Optimum Operating Current- Imp(A)	12.89	10.41	12.96	10.47	13.03	10.52	13.11	10.59	13.18	10.64	13.26	10.71
Open Circuit Voltage- Voc	51.55	47.47	51.68	47.59	51.81	47.71	51.94	47.83	52.07	47.95	52.20	48.07
Short Circuit Current- Isc(A)	13.85	11.18	13.92	11.24	13.99	11.30	14.06	11.35	14.13	11.41	14.20	11.47
Module Efficiency (%)	22.08%		22.27%		22.45%		22.65%		22.84%		23.05%	



IV Curve Variation with Temperature



IV Curve Variation with Irradiance



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)]

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
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	(91.87mm x 182.2mm) 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 (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:	30A

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:	224	280	616
No. of Pallets per Container:	08	10	22
No. of Modules per Pallet/Weight:	28 Nos/835 Kg		
Pallet Dimensions in mm:	2290(L)*1000(W)*1227(H)		

ELECTRICAL PERFORMANCE [Note: Power tolerance: 0 ~ +4.99 W. Power measurement uncertainty: < ±3%. Average value of NMOT: 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.

Version - TDS/2025-26/001