

PINAK

610 Wp - 630 Wp

N-TYPE TOPCON 16BB

BIFACIAL (GLASS to GLASS)



Product Warranty on Materials
and Workmanship 15 Years*



Linear Performance
Warranty for 30 Years*

PRODUCT | KEY FEATURES

- Superior Module Efficiency with Bifacial Power Gain
- Anti-Reflective (AR) Coated Glass for Enhanced Power
- Positive Power Tolerance with Current Binning to Minimize Mismatch Losses
- ASOT Solar Modules ensure Long-Term Reliability



BIS APPROVED



R-72011754



Management
Certificates

ISO 9001:2015
ISO 14001:2015
ISO 45001:2018

Product
Certificates

IS 14286/IEC 61215
IS/IEC 61730/1
IS/IEC 61730/2

TECHNICAL DATA

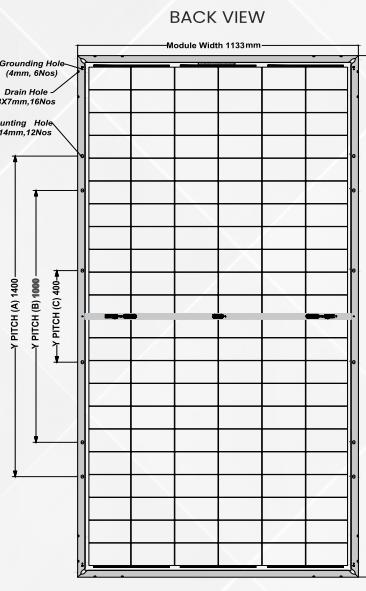
ELECTRICAL PERFORMANCE [Note: Power tolerance: 0 ~ +4.99 W. Power measurement uncertainty: < ±3%. Average value of NOCT: 45.08 ± 2 °C]

ELECTRICAL CHARACTERISTICS*	ASPL16BB132-610		ASPL16BB132-615		ASPL16BB132-620		ASPL16BB132-625		ASPL16BB132-630	
	STC	NOCT								
Nominal Maximum Power (Pmax)	610 W	457 W	615 W	461 W	620 W	465 W	625 W	468 W	630 W	476 W
Optimum Operating Voltage (Vmp)	40.95 V	38.45 V	41.18 V	38.67 V	41.37 V	38.85 V	41.52 V	38.99 V	41.52 V	38.88 V
Optimum Operating Current (Imp)	14.95 A	11.90 A	14.95 A	11.93 A	15.00 A	11.97 A	15.06 A	12.02 A	15.10 A	12.17 A
Open Circuit Voltage (Voc)	48.54 V	45.77 V	48.68 V	45.91 V	48.92 V	46.13 V	49.18 V	46.38 V	49.50 V	47.03 V
Short Circuit Current (Isc)	15.66 A	12.62 A	15.669 A	12.65 A	15.72 A	12.67 A	15.73 A	12.68 A	16.12 A	12.99 A
Module Efficiency	22.60%		22.79 %		22.97 %		23.16 %		23.32%	

BIFACIAL OUTPUT – BACKSIDE POWER GAIN @ STC* [Bifaciality Factor: 80% ± 05%]

[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%	Nominal Maximum Power (Pmax)	640 W	645 W	651 W	656 W
	Module Short Circuit Current / Efficiency	16.44 A / 23.73 %	16.48 A / 23.93 %	16.50 A / 24.12 %	16.52 A / 24.32 %
10%	Nominal Maximum Power (Pmax)	671 W	676 W	682 W	687 W
	Module Short Circuit Current / Efficiency	17.23 A / 24.86 %	17.26 A / 25.07 %	17.29 A / 25.27 %	17.30 A / 25.47 %
25%	Nominal Maximum Power (Pmax)	762 W	768 W	775 W	781 W
	Module Short Circuit Current / Efficiency	19.58 A / 28.25 %	19.62 A / 28.48 %	19.65 A / 28.72 %	19.66 A / 28.95 %

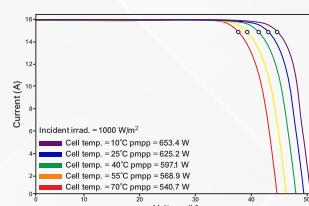


*All dimensions are in mm with +/- 2mm tolerance.

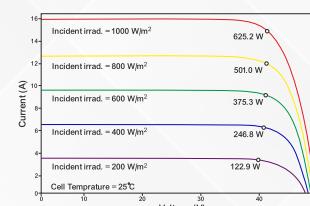
SIDE VIEW



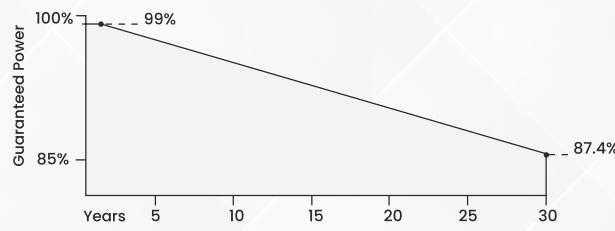
IV Curve Variation with Temperature



IV Curve Variation with Irradiance



LINEAR PERFORMANCE WARRANTY



MECHANICAL SPECIFICATIONS

Dimensions	2382(L) x 1133(W) x 35(T) in mm
Weight(kg)	34.5
Cell type / No Of Cell	132 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	Low Iron semi-Tempered Glass (2 mm thick)
Junction Box	35A Split Junction Box (3 nos. with individual Bypass Diode) - Weatherproof (IP68)
Bypass Diode	45 V, 200 °C max. junction temperature
Cable	4 sq. mm, 300 mm length (Customised cable length available on request)
Connectors	MC4 compatible (MC4 original available on request)
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] 1400, [B] 1000, [C] 400
Mounting Holes Pitch (X)-mm	1095

MAXIMUM OPERATING CONDITIONS

Operating Temperature:	-40°C to +85°C
Maximum System Voltage:	1500V
Maximum Series Fuse Rating:	35 A

TEMPERATURE COEFFICIENTS

Current α (Isc):	0.0350%/°C
Voltage β (Voc):	-0.2277%/°C
Power Υ (Pmax):	-0.2827%/°C

STACKING STANDARD 20FT 40FT

No. of Modules per Container:	279	620
No. of Pallets per Container:	09	20
No. of Modules per Pallet/Weight:	31 Nos/1130 Kg	
Pallet Dimensions in mm :	2420(L)*1130(W)*1275(H)	

Caution : Please read all safety and installation instructions before using the product.

Warranty : Linear performance warranty for 30 years, with degradation up to 1% in the 1st year and 0.4%/year from year 2 to year 30. Please read ASOT Solar warranty documents thoroughly.

Disclaimer : Specifications mentioned in this datasheet are subject to change without prior notice due to continuous product innovation and R&D activities. Asote Solutions Pvt. Ltd. reserves the right to make adjustments to the information described here. The dataset contained in this specification does not represent a single module's performance.