

by Panasonic





144 HALF-CELL N-TYPE TOPCON DUAL **GLASS BIFACIAL MODULE**

AE14TXXXVHC16B5







Aesthetics Meets Performance

Special Cell Design

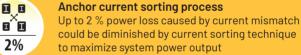


16 BB design decreases the distance between bus bars and finger grid line for power increase. Half-cell reduces internal losses to increase module efficiency.

process

Trust Anchor to Deliver Reliable Performance Over Time

- World-class manufacturer of crystalline silicon photovoltaic modules
- Rigorous quality control meeting the highest international standards: ISO 9001, ISO 14001 and ISO 45001
- Regular independently checked production process from international accredited institute/company
- Tested for harsh environments (IEC 61701, IEC 62716)
- · Long-term reliability tests
- 2 × 100% EL inspection ensuring defect-free modules



High module conversion efficiency

Module efficiency upto 22.8 % achieved through advanced cell technology and manufacturing



111.

High Efficiency

Excellent weak light performance

More power output in weak light condition, such as haze, clouds, early and late sun hours



Lower operating temperature

Lower operating temperature and temperature coefficient increases the power output



Extended wind and snow load tests

Module certified to withstand extreme wind (2400 Pascal) and snow loads (5400 Pascal)*



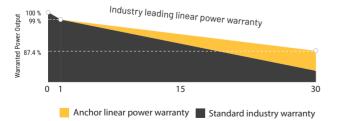
Withstanding Harsh Environment

Reliable quality leads to better sustainability even in harsh environment like desert and coastal area



Industry-leading Warranty based on nominal power

- Product warranty: 15 years
- Annual degradation: 0.40%
- · Linear performance warranty: 30 years





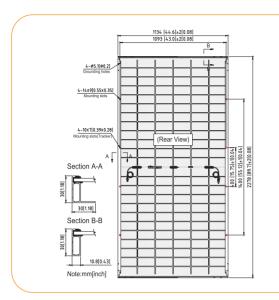
Certifications and standards: IEC 61215, IEC 61730, IEC 61701, IEC 62716

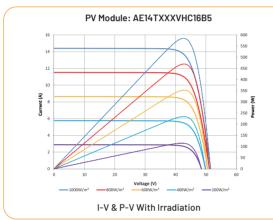






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Dealer Information

AE14TXXXVHC16B5

Electrical Characteristics

STC	AE14TXXXVHC16B5				
Wattage, Wp	570W	575W	580W	585W	590W
Voltage at Max Power, Vmax	42.44V	42.56V	42.68V	42.79V	42.91V
Open Circuit Voltage, Voc	51.16V	51.29V	51.42V	51.55V	51.68V
Current at Max Power, Imax	13.43A	13.51A	13.59A	13.67A	13.75A
Short Circuit Current, Isc	14.16A	14.24A	14.32A	14.40A	14.48A
Module Efficiency	22.1%	22.3%	22.5%	22.6%	22.8%
Operating Temperature (°C)	-40°C ~ +85°C				
Maximum System Voltage	1500 V DC (IEC)				
Maximum Series Fuse Rating	25 A				
Power Tolerance	0, +5Wp				

STC: Irradiance 1000 W/m², Cell Temperature 25°C, AM=1.5 # PLSIND reserves the right to adjust the listed parameters without notice.

NOCT	AE14TXXXVHC16B5				
Maximum Power at NOCT, Wp	434.6W	438.4W	442.2W	445.9W	448.8W
Voltage at Max Power, Vmax	40.1V	40.2V	40.3V	40.4V	40.5V
Open Circuit Voltage, Voc	48.6V	48.7V	48.8V	48.9V	49.1V
Current at Max Power, Imax	10.85A	10.91A	10.98A	11.04A	11.07A
Short Circuit Current, Isc	11.42A	11.48A	11.54A	11.61A	11.67A

NOCT: Irradiance 800 W/m2, ambient temperature 20 $^{\circ}$ C, AM=1.5, wind speed 1 m/s. # PLSIND reserves the right to adjust the listed parameters without notice.

BIFACIAL GAIN (80±5)%	AE14TXXXVHC16B5				
5% Power Pmax	598.5W	603.75W	609W	614.25W	619.5W
15% Power Pmax	655.5W	661.25W	667W	672.75W	678.5W
25% Power Pmax	712.5W	718.75W	725W	731.25W	737.5W

- Bifacial gains depends on the power plant design and albedo of installation site
 Power Bifaciality=Pmax(Rear)/Pmax(Front) and Pmax Front are tested under STC Measuring Tolerance: ±3%

Temperature Characteristics

Temperature Coefficient of Pmax(γ)	-0.29 %/°C
Temperature Coefficient of Voc(β)	-0.25 %/°C
Temperature Coefficient of Isc(a)	0.046 %/°C
Nominal Module Operating Temperature (NMOT)	42±2°C

Mechanical Characteristics

Cell Type	N-type Topcon 91mm * 182mm			
No.of Cells	144 (12x6 12x6)			
Dimensions	2278 × 1134 × 30 mm			
Weight	32.0 kg			
Front Glass	2.0 mm semi-tempered glass			
Rear Cover	2.0 mm semi-tempered glass			
Frame	Anodized aluminium alloy			
Junction Box	3 Split, IP68 Rated			
Output Cables	4.0 mm ²			
	(-) 350 mm and (+) 160 mm in length or customized length			
Connectors	MC4 Compatible - STP-XC4			

Packing Configuration

Container	40' HC
Pieces per pallet	36
Pallets per container	20
Pieces per container	720

 $\hbox{\# PLSIND stands for Panasonic Life Solutions India Pvt. Ltd.}$

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