





108 HALF-CELL N-TYPE TOPCON DUAL GLASS ALL BLACK BIFACIAL MODULE

AE10TXXXUHC16B6







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

Industry-leading Warranty based on nominal power

- Tested for harsh environments (IEC 61701, IEC 62716)
- · Long-term reliability tests

- First year power degradation: 1%

Annual degradation: 0.40%

• 2 × 100% EL inspection ensuring defect-free modules

Anchor current sorting process



111

High Efficiency

Up to 2% power loss caused by current mismatch could be diminished by current sorting technique to maximize system power output

Module efficiency upto 22.5 % achieved through advanced cell technology and manufacturing



Excellent weak light performance

High module conversion efficiency

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



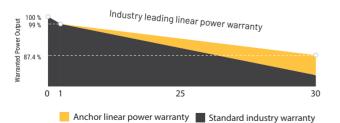
Extended wind and snow load tests

Module certified to withstand extreme wind (2400 Pascal) and snow loads (5400 Pascal) *Additionally verified for wind upto 3800 Pascal



Withstanding Harsh Environment

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





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

• Product warranty: 25 years

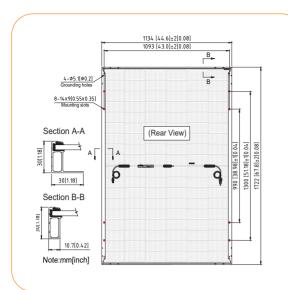
· Linear performance warranty: 30 years

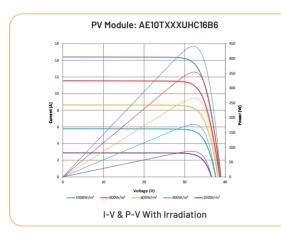






by Panasonic





Dealer Information

AE10TXXXUHC16B6

Electrical Characteristics

STC	AE10TXXXUHC16B6				
Wattage, Wp	420W	425W	430W	435W	440W
Voltage at Max Power, Vmax	31.96V	32.15V	32.33V	32.51V	32.69V
Open Circuit Voltage, Voc	38.46V	38.59V	38.72V	38.85V	38.98V
Current at Max Power, Imax	13.14A	13.22A	13.30A	13.38A	13.46A
Short Circuit Current, Isc	14.09A	14.17A	14.25A	14.33A	14.41A
Module Efficiency	21.5%	21.8%	22%	22.3%	22.5%
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	AE10TXXXUHC16B6				
Maximum Power at NOCT, Wp	321.1W	325W	328.7W	332.5W	336.4W
Voltage at Max Power, Vmax	29.9V	30V	30.2V	30.3V	30.5V
Open Circuit Voltage, Voc	36.5V	36.6V	36.8V	36.9V	37.0V
Current at Max Power, Imax	10.75A	10.82A	10.89A	10.96A	11.03A
Short Circuit Current, Isc	11.36A	11.42A	11.49A	11.55A	11.62A

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)%	AE10TXXXUHC16B6				
	5% Power Pmax	441W	446.25W	451.5W	456.75W	462W
÷	15% Power Pmax	483W	488.75W	494.5W	500.25W	506W
	25% Power Pmax	525W	531.25W	537.5W	543.75W	550W

- 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)	-0.30 %/°C
Temperature Coefficient of Voc(β)	-0.25 %/°C
Temperature Coefficient of Isc(α)	0.046 %/°C
Nominal Module Operating Temperature (NMOT)	42±2°C

Mechanical Characteristics

Cell Type	N-type Topcon 91mm * 182mm			
No.of Cells	108(9x6 9x6)			
Dimensions	1722 × 1134 × 30 mm			
Weight	21.0 kg			
Front Glass	1.6 mm semi-tempered glass			
Rear Cover	1.6 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 - EV02			

Packing Configuration

Container	40' HC
Pieces per pallet	36
Pallets per container	26
Pieces per container	936

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

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