

# 310-315-320 Watt

## POLYCRYSTALLINE SOLAR MODULE

AE7P310VB4B • AE7P315VB4B • AE7P320VB4B

### • Salient Features



#### High module conversion efficiency

Module efficiency up to 16.5% achieved through advanced cell technology and manufacturing capabilities



#### Positive tolerance

Positive tolerance of up to +5W delivers higher outputs reliability



#### Extended wind and snow load tests

Module certified to withstand extreme wind (3800 Pascal) and snow loads (5400 Pascal)\*



#### Excellent weak light performance

Excellent performance under low light conditions



#### Current sorting process

System output maximised by reducing mismatch losses up to 2% with modules sorted & packaged by amperage



#### Withstanding harsh environment

Reliable quality leads to better sustainability even in harsh environment like desert, farm & coastline



#### PID resistant

Advanced cell technology and qualified materials lead to high resistance to PID



#### Salt mist resistant

Salt mist corrosion resistant. Suitable for seaside environment.



#### Ammonia resistant

Ammonia resistant. Suitable for farm environment.



Certifications and standards:  
IEC 61215, IEC 61730  
IEC 62804 | IEC 62716 | IEC 61701



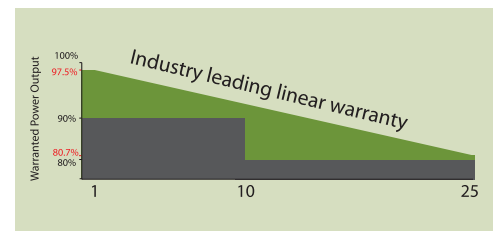


## Trust Anchor to deliver reliable performance over time

- World-class manufacturer of crystalline silicon photovoltaic modules
- Unrivaled manufacturing capacity and world-class technology
- Rigorous quality control meeting the highest international standards: ISO 9001: 2008, ISO 14001: 2004 and ISO17025: 2005
- Regular independently checked production process from international accredited institute/company
- Tested for harsh environments (salt mist, ammonia corrosion and sand blowing testing : IEC 61701, IEC 62716, DIN EN 60068-2-68)\*
- Long-term reliability tests
- 2x100% EL inspection ensuring defect-free modules

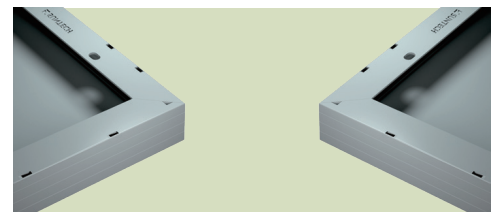
## Industry-leading warranty based on nominal power

- 97.5% in the first year, thereafter, for years two (2) through twenty-five (25), 0.7% maximum decrease from module's nominal power output per year, ending with the 80.7%; in the 25th year after the defined WARRANTY STARTING DATE.\*\*
- 12-year material and workmanship warranty
- 25-year linear performance warranty



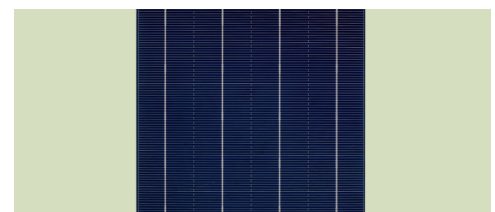
## Compact and durable frame design

- New compact frame design is light-weight and easier to handle during installation. The rigid and durable hollow chamber guarantees the same long-term and reliable performance.



## Special 4 busbar design

- The unique cell design leads tremendous reduction in electrodes resistance and raise in conversion efficiency. Less residual stress, less cell microcracks and hotspot risks.



## IP67 Rated Junction Box

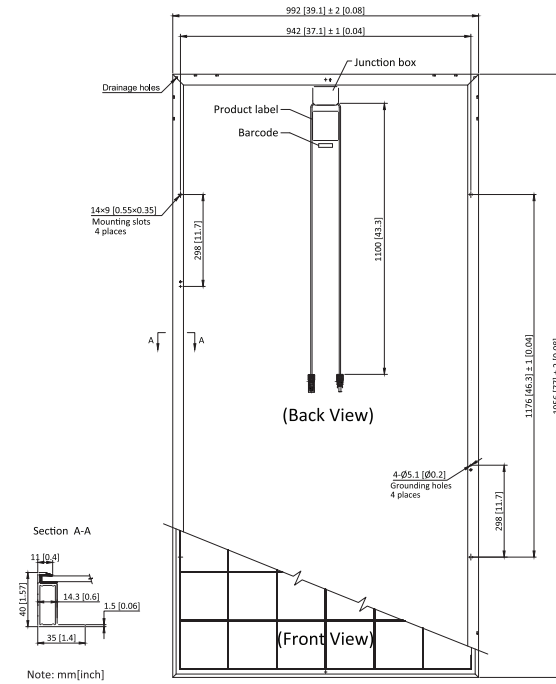
- IP67 rated junction box ensures an outstanding waterproof level, supports installations in all orientations and reduces stress on the cables. High reliable performance, low-resistance connectors ensure maximum output for the highest energy production



\* Please refer to Standard Module Installation Manual for details.

\*\* Please refer to Product Warranty for details.

AE7P310VB4B • AE7P315VB4B • AE7P320VB4B



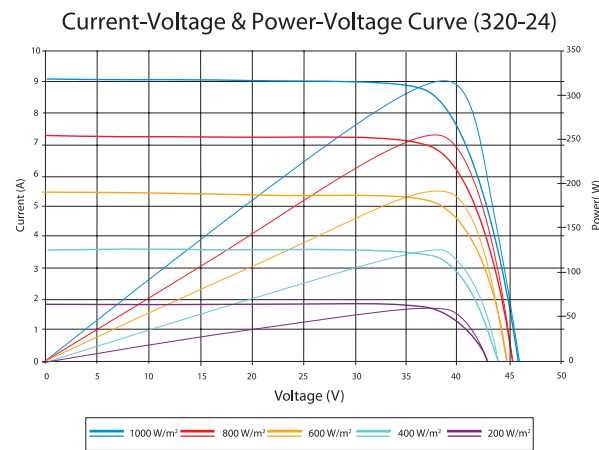
Electrical Characteristics

STC	AE7P320VB4B	AE7P315VB4B	AE7P310VB4B
Maximum Power at STC (Pmax)	320 W	315 W	310 W
Optimum Operating Voltage (Vmp)	37.1 V	36.8 V	36.5 V
Optimum Operating Current (Imp)	8.63 A	8.56 A	8.50 A
Open Circuit Voltage (Voc)	45.6 V	45.1 V	44.9 V
Short Circuit Current (Isc)	9.14 A	9.02 A	8.96 A
Module Efficiency	16.5%	16.2%	16.0%
Operating Module Temperature	-40 °C to +85 °C		
Maximum System Voltage	1000 V DC (IEC)		
Maximum Series Fuse Rating	20 A		
Power Tolerance	0/+5 W		

STC: Irradiance 1000 W/m<sup>2</sup>, module temperature 25 °C, AM=1.5;  
Best in Class AAA solar simulator (IEC 60904-9) used, power measurement uncertainty is within +/- 3%

NOCT	AE7P320VB4B	AE7P315VB4B	AE7P310VB4B
Maximum Power at NOCT (Pmax)	235 W	229 W	226 W
Optimum Operating Voltage (Vmp)	34.0 V	33.2 V	32.8 V
Optimum Operating Current (Imp)	6.90 A	6.91 A	6.88 A
Open Circuit Voltage (Voc)	41.8 V	41.5 V	40.9 V
Short Circuit Current (Isc)	7.40 A	7.30 A	7.26 A

NOCT: Irradiance 800 W/m<sup>2</sup>, ambient temperature 20 °C, AM=1.5, wind speed 1 m/s;  
Best in Class AAA solar simulator (IEC 60904-9) used, power measurement uncertainty is within +/- 3%



Excellent performance under weak light conditions: at an irradiation intensity of 200 W/m<sup>2</sup> (AM 1.5, 25°C), **96.5%** or higher of the STC efficiency (1000 W/m<sup>2</sup>) is achieved

### Temperature Characteristics

Nominal Operating Cell Temperature (NOCT)	45±2°C
Temperature Coefficient of Pmax	-0.41 %/°C
Temperature Coefficient of Voc	-0.33 %/°C
Temperature Coefficient of Isc	0.067 %/°C

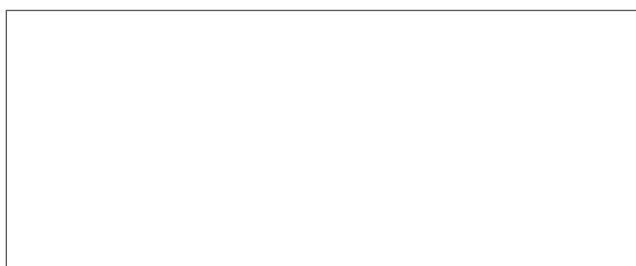
### Mechanical Characteristics

Solar Cell	Polycrystalline silicon 156 × 156 mm (6 inches)
No. of Cells	72 (6 × 12)
Dimensions	1956 X 992 X 40mm (77.0 X 39.1 X 1.6 inches)
Weight	25.8 kgs (56.9 lbs.)
Front Glass	4.0 mm (0.16 inches) tempered glass
Frame	Anodized aluminium alloy
Junction Box	IP67 rated (3 bypass diodes)
Output Cables	TUV (2Pfg1169:2007) 4.0 mm <sup>2</sup> (0.006 inches <sup>2</sup> ), symmetrical lengths (-) 1100mm (43.3 inches) and (+) 1100 mm (43.3 inches)
Connectors	MC4 compatible
Back Sheet	High resistant polyester
Encapsulating Material	Ethylene Vinyl Acetate (EVA)

### Packing Configuration

Container	20' GP	40' GP	40' HC
Pieces per pallet	25	25	25
Pallets per container	5	12	24
Pieces per container	125	300	600

### Dealer information



#### Anchor Electricals Pvt Ltd.

3rd Floor, B Wing, I-Think Techno Campus,  
Pokhran Road No.2, Thane (W),  
Thane-400 607 | Tel: 022 30418888  
Email: solar@anchor-world.com  
www.anchor-world.com