



# 530-550 Watt

144 HALF-CELL MONO PERC MODULE

## AE14HXXXVHC10B

## **Special Cell Design**



MBB technology decreases the distance between bus bars and finger grid line which is benefit to power increase. Half-cell aims to eliminate the cell gap to increase module efficiency.

### IP68 Rated Junction Box



The IP 68 rated junction box ensures an outstanding waterproofing, supports installation in all orientations with less stress on the cables. Highly reliable performance with low resistance connectors ensures maximum output for higher energy production.



- World-class manufacturer of crystalline silicon photovoltaic modules
- Rigorous quality control meeting the highest international standards: ISO 9001, ISO 14001 and ISO17025
- 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

### Industry-leading Warranty based on nominal power

- 98% in the first year; thereafter, for years two (2) through twenty five (25), 0.55% maximum decrease from MODULE'S nominal power output per year, ending with the 84.8% in the 25th year after the defined WARRANTY STARTING DATE.
  Product Warranty is of 12 Years\*\*
- 25 year linear performance warranty





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

High module conversion efficiency Module efficiency up to 21.3 % achieved through advanced cell technology and manufacturing process



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



#### 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



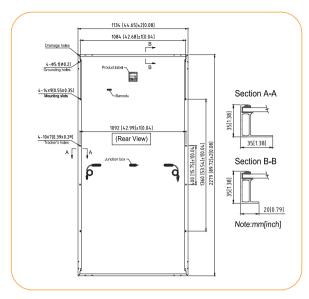
Extended wind and snow load tests Module certified to withstand extreme wind (2400 Pascal) and snow loads (5400 Pascal)\*

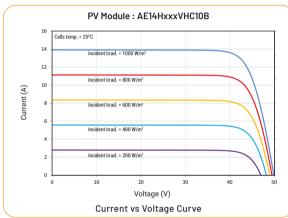


Withstanding Harsh Environment Reliable quality leads to better sustainability even in harsh environment like desert and coastal area

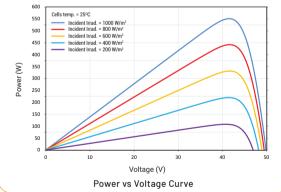
\* Please refer to PLSIND Standard Module Installation Manual for details. \*\* Please refer to PLSIND Product Warranty for details.

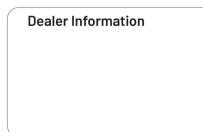












# AE14HXXXVHC10B

## **Electrical Characteristics**

STC	AE14HxxxVHC10B				
Wattage, Wp	550W	545W	540W	535W	530W
Voltage at Max Power, Vmax	42.05V	41.87V	41.75V	41.57V	41.39V
Open Circuit Voltage, Voc	49.88V	49.69V	49.54V	49.39V	49.24V
Current at Max Power, Imax	13.08A	13.02A	12.94A	12.87A	12.81A
Short Circuit Current, Isc	14.01A	13.96A	13.89A	13.83A	13.76A
Module Efficiency	21.3%	21.1%	20.9%	20.7%	20.5%
Operating Temperature (°C)	-40°C ~ +85°C				
Maximum System Voltage	1500 V DC (IEC)				
Maximum Series Fuse Rating	25 A				
Power Tolerance	0 to +5Wp				

STC: Irradiance 1000 W/m², Module temperature 25 °C, AM=1.5

Tolerance of Wp is within +/- 3% ;

# PLSIND reserves the right to adjust the listed parameters without notice.

NMOT			1411000	0.0	
NMOT	AE14HxxxVHC10B				
Maximum Power at NMOT, Wp	415.0W	411.5W	408.0W	404.3W	400.6W
Voltage at Max Power, Vmax	38.9V	38.7V	38.6V	38.4V	38.2V
Open Circuit Voltage, Voc	46.9V	46.7V	46.5V	46.4V	46.3V
Current at Max Power, Imax	10.67A	10.63A	10.58A	10.53A	10.47A
Short Circuit Current, Isc	11.22A	11.18A	11.13A	11.08A	11.02A

NMOT: Irradiance 800 W/m2, ambient temperature 20 °C, AM=1.5, wind speed 1 m/s. # PLSIND reserves the right to adjust the listed parameters without notice.

## **Temperature Characteristics**

Temperature Coefficient of Pmax(y)	-0.36 %/°C	
Temperature Coefficient of Voc(β)	-0.304 %/°C	
Temperature Coefficient of Isc(a)	+0.050 %/°C	
Nominal Operating Cell Temperature (NOCT)	42±2°C	

# **Mechanical Characteristics**

Cell Type	Monocrystalline Silicon 182 mm
No.of Cells	144 (6 × 24)
Dimensions	2279 × 1134 × 35 mm
Weight	29.1 kg
Front Glass	3.2mm
Frame	Anodized aluminum alloy
Junction Box	IP68 rated (3 bypass diodes)
Output Cables	4mm <sup>2</sup>
	Portrait: (-) 350 mm and (+) 160 mm in length
	Landscape : (-)1 400 mm and (+) 1400 mm in length
	or customized length
Connectors	MC4 EVO2, Cable 01S

# **Packing Configuration**

Container	40' HC	Pieces per pallet	31
Pallets per container	20	Pieces per container	620
Packaging box dimensions	2310×1130×1245 mm	Packaging box weight	965 kg

# PLSIND stands for Panasonic Life Solutions India Pvt. Ltd.

#### Panasonic Life Solutions India Pvt. Ltd.

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Information on how to install and operate this product is available in the installation instruction. All values indicated in this data sheet are subject to change without prior announcement. The specifications may vary slightly. All specifications are in accordance with standard EN 50380. Color differences of the modules relative to the figures as well as discolorations of/in the modules which do not impair their proper functioning are possible and do not constitute a deviation from the specification.