

# by Panasonic



# **430-445**watt

## 144 CELL HALF CUT MONO PERC **SOLAR MODULE**

### • AE14HXXXVHC9B

#### **Special Cell Design**



The unique cell design leads to reduced electrodes resistance and smaller current, thus enables higher fill factor. Meanwhile, it can reduce losses of mismatch and cell wear, and increase total reflection.

#### **IP68 Rated Junction Box**



IP68 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.

#### **High power output**

Compared to 158.75mm module, the power output can increase 25W-30W



#### **High PID resistant**

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



#### **Excellent weak light performance**

More power output in weak light condition, such as haze, cloudy, and morning



#### Lower operating temperature

Lower operating temperature and temperature coefficient increases the power output



#### **Extended load tests**

Module certified to withstand front side maximum static test load (5400 Pascal) and rear side maximum static test loads (3800 Pascal)\*



#### Withstanding Harsh Environment

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



Trust Anchor to Deliver Reliable Performance Over Time

· World-class manufacturer of crystalline silicon photovoltaic modules

• Rigorous quality control meeting the highest international standards:

• Regular independently checked production process from international

Tested for harsh environments (salt mist, ammonia corrosion and sand

· Unrivaled manufacturing capacity and world-class technology

# 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.\*\*\*
- · 12-year product warranty
- · 25-year linear performance warranty

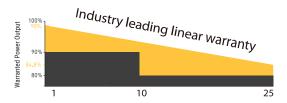
IS09001, ISO 14001 and IS017025

accredited institute/company

· Long-term reliability tests

blowing testing: IEC 61701, IEC 62716)\*\*\*

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





DIN EN 61215 (VDE 0126 - 31) DIN EN 61730 - 1 (VDE 0126 Teil) DIN EN 61730 - 2 (VDE 0126 30 -1 - 30 - 2) Certifications and standards: IEC 61215, IEC 61730 IEC 62716 | IEC 61701





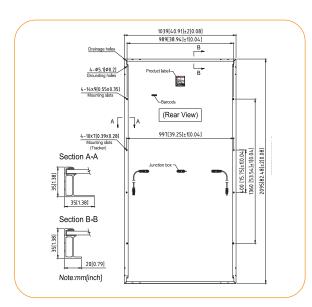


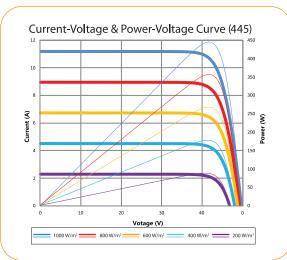


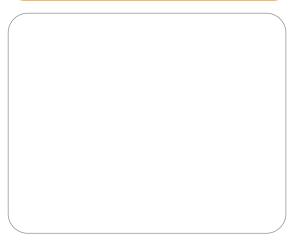












#### AE14HXXXVHC9B

#### **Electrical Characteristics**

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STC	• AE14H	IXXXVHC	9B		
Maximum Power at STC (Pmax)	445 W	440 W	435 W	430 W	
Optimum Operating Voltage (Vmp)	41.2 V	41.0 V	40.8 V	40.6 V	
Optimum Operating Current (Imp)	10.81 A	10.74 A	10.67 A	10.60 A	
Open Circuit Voltage (Voc)	49.0 V	48.8 V	48.6 V	48.4 V	
Short Circuit Current (Isc)	11.54 A	11.47 A	11.40 A	11.32 A	
Module Efficiency	20.4%	20.2%	20.0%	19.8%	
Operating Module Temperature	-40°C to + 85°C				
Maximum System Voltage	1500 V DC (IEC)				
Maximum Series Fuse Rating	20 A				
Power Tolerance		0/+5 W			

STC: Irradiance 1000 W/m2, module temperature 25 °C, AM=1.5; Best in Class AAA solar simulator (IEC 60904-9) used, power measurement uncertainty is within +/- 3%#PLSIND reserves the right to adjust the listed parameters without notice.

NMOT	• AE14H	XXXVHC9	В		
Maximum Power at NMOT (Pmax)	335.8 W	332.7 W	327.7 W	324.6 W	
Optimum Operating Voltage (Vmp)	38.0 V	37.8 V	37.6 V	37.5 V	
Optimum Operating Current (Imp)	8.84 A	8.78 A	8.73 A	8.67 A	
Open Circuit Voltage (Voc)	46.0 V	45.8 V	45.5 V	45.4 V	
Short Circuit Current (Isc)	9.31 A	9.25 A	9.20 A	9.13 A	

NMOT: Irradiance 800 W/m2, ambient temperature 20 °C, AM=1.5, wind speed 1 m/s

#### **Temperature Characteristics**

Nominal Module Operating Temperature (NMOT)	42 ± 2 °C	
Temperature Coefficient of Pmax	-0.36%/°C	
Temperature Coefficient of Voc	-0.304%/°C	
Temperature Coefficient of Isc	0.050%/°C	

#### **Mechanical Characteristics**

Mono Perc silicon 166 mm
144 (6 × 24)
2095 × 1039 × 35 mm (82.5 × 40.9 × 1.4 inches)
24.5 kgs (54.0 lbs.)
3.2 mm (0.13 inches) tempered glass
Anodized aluminium alloy
IP68 rated (3 bypass diodes)
4.0 mm2,
Portrait: (-)350 mm and (+)160 mm in length
Landscape: (-)1400 mm and (+)1400 mm in length
or customized length
MC4 EVO2, Cable 01S

Packing	Configuration

Container	20' GP	40' HC	
Pieces per pallet	31	31	
Pallets per container	5	22	
Pieces per container	155	682	
Packaging box dimensions	2125×1130×1205 mm		
Packaging box weight	812 kg		

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

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

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