



by **Panasonic**

435-455Watt

Mono Crystalline Half Cut PERC Module

- AE14H435VHC9B • AE14H440VHC9B
- AE14H445VHC9B • AE14H450VHC9B
- AE14H455VHC9B



Special 9 Busbar 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



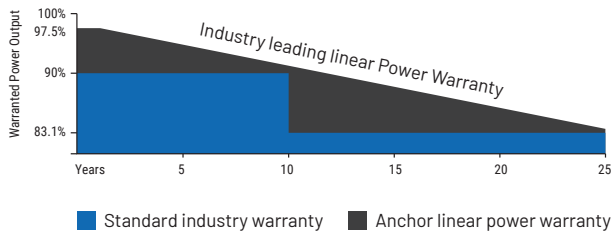
The IP 68 rated junction box ensures an outstanding waterproofing, supports installation in all orientations with less stress on the cables. Highly reliable performance with low resistance connectors ensures maximum output for higher energy production.

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 9001:2015, ISO 14001:2015 and ISO 45001:2018
- Regular independently checked production process from international accredited institute/company
- Independently Tested for Harsh Environment Conditions
- Long-term reliability tests
- 2 x 100% EL inspection ensuring defect-free modules

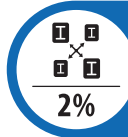
Industry-leading Warranty based on nominal power

- 97.5% in the first year; thereafter, for years two (2) through twenty five (25), 0.60% maximum decrease from MODULE'S nominal power output per year, ending with the 83.10% in the 25th year after the defined WARRANTY STARTING DATE.
- Product Warranty is of 12 Years**
- 25 year linear performance warranty



High module conversion efficiency

Module efficiency up to 20.93% 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



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



Certifications and Standards : IEC 61215- 1 & 2, IEC 61730- 1 & 2, IEC 62804, IEC 61701



Made in India
PV Modules

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

- 1) AE14H435VHC9B 2) AE14H440VHC9B 3) AE14H445VHC9B
4) AE14H450VHC9B 5) AE14H455VHC9B

Electrical Characteristics

STC	1	2	3	4	5
Wattage, Wp	435W	440W	445W	450W	455W
Voltage at Max Power, Vmax	41.21V	41.41V	41.61V	41.81V	42.02V
Open Circuit Voltage, Voc	49.59V	49.69V	49.89V	50.10V	50.30V
Current at Max Power, Imax	10.56A	10.63A	10.70A	10.77A	10.84A
Short Circuit Current, Isc	11.25A	11.34A	11.41A	11.46A	11.53A
Module Efficiency	20.01%	20.24%	20.47%	20.70%	20.93%
Operating Temperature (°C)	-40 to 85				
Maximum System Voltage	1500 V DC (IEC)				
Maximum Series Fuse Rating	20 A				
Power Tolerance	0 to +5Wp				

STC: Irradiance 1000 W/m², Module temperature 25 °C, AM=1.5
PLSTR reserves the right to adjust the listed parameters without notice.

NMOT	1	2	3	4	5
Maximum Power at NMOT (Pmax)	326.0W	329.8W	333.3W	336.8W	340.5W
Optimum Operating Voltage (Vmp)	37.90V	38.10V	38.20V	38.50V	38.70V
Optimum Operating Current (Imp)	8.60A	8.65A	8.72A	8.75A	8.80A
Open Circuit Voltage (Voc)	46.20V	46.30V	46.50V	46.70V	46.80V
Short Circuit Current, Isc	9.10A	9.17A	9.23A	9.27A	9.32A

Ambient temperature 20°C

Temperature Characteristics

Temperature Coefficient of Pmax(γ)	-0.365
Temperature Coefficient of Voc(β)	-0.285
Temperature Coefficient of Isc(α)	0.055
Nominal Operating Cell Temperature (NOCT)	43 ± 2

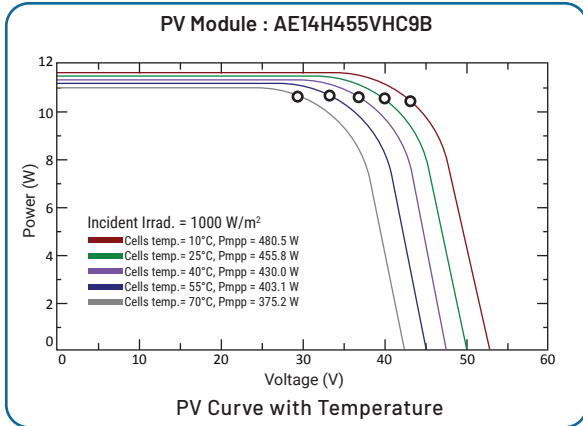
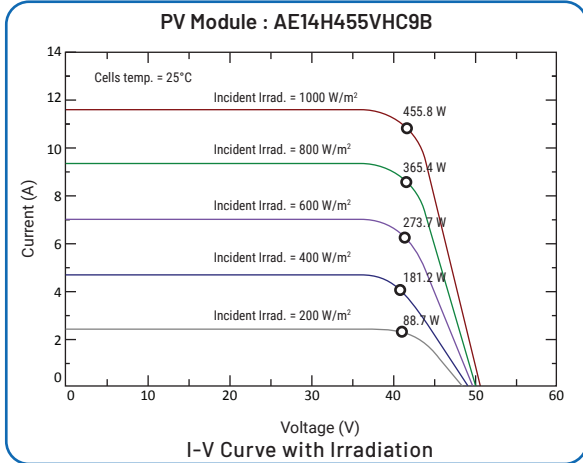
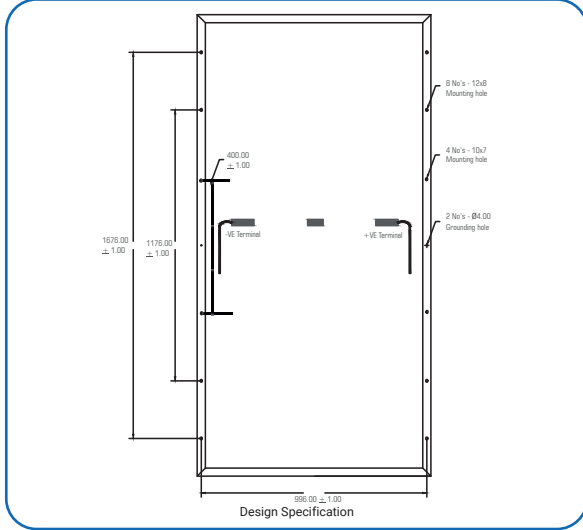
Mechanical Characteristics

Cell Type	Mono Crystalline - PERC
No. of Cells	144 (6 × 12)
Dimensions	2094 mm (L) x 1038 mm (W) x 35 mm (T)
Weight	23.5 kg
Front Glass	3.2 mm Low Iron and Tempered glass with ARC coating
Frame	Anodized aluminum alloy
Junction Box	IP68 rated
Output Cables	4 mm & 500mm
Connectors	MC4 compatible
By-pass Diodes	3 pcs

Packing Configuration

Container	40' GP	
Pieces per pallet	31 (Upper Stack)	35 (Lower Stack)
Pallets per container	11 (Upper Stack)	11 (Lower Stack)
Pieces per container	726	

PLSTR stands for Panasonic Life Solutions India Pvt. Ltd.



Dealer Information

Panasonic Life Solutions Elektrik San. ve Tic. A.Ş.
Abdurrahmangazi Mah. Ebubekir Cad. No: 44 34887 Sancaktepe
İstanbul / Türkiye T: +90 (216) 564 55 55 F: +90 (216) 564 55 44
lstr.panasonic.com