

BI FACIAL PANEL 545 EVS DCR Panel 540 - 550 Bifacial Non DCR

ALMM Approved List by MNRE*

THE INDUSTRY'S BENCHMARK

V-Guard's range of Solar Power Systems are the perfect choice for you if you are looking for a safe, powerful and reliable source of energy. Solar Power Systems i.e. setups made up of photovoltaic or PV Modules, an inverter unit and battery, does the job of effectively converting sunlight into electricity.

Why go for solar?

The answer is simple: the sun's rays can be harvested for energy over and over again without depleting the source. By providing more energy and lasting longer than other brands, V-Guard Solar Power Systems are the best choice for cutting your carbon footprint down to size. When you invest in a Solar Power System, you are essentially purchasing 25 to 30 years of electricity at

PRODUCT CERTIFICATE

IECEE CB Scheme	IEC 61215 Design Qualification	IEC 61730-1 / 2 Safety Qualification	IS 14286 BIS Qualification	Better Performance
ISO ISO 9000 Certified Mfg. Process	ISO ISO 14000 Enviromental Mgt. System	M10-Cell	Split type-JB	Better Performance

MADE IN INDIA



Linear Performance warranty*



Product warranty on materials and workmanship

PRODUCT | KEY FEATURES

-  AR Coated Tempered Glass Anti-Reflective Modules Surface
-  Excellent Module Efficiency with Mono PERC cells through 100% Automation
-  Positive Power Tolerance with Current Binning to Prevent Mismatch Losses
-  Pre and Post EL Checking With High Resolution Camera
-  IP68 Junction Box for Long Term Endurance
-  100% High Voltage Testing to Ensure Safety
-  MBB Half-Cell Technology provides Better Performance under Partial Shading

TECHNICAL DATA

PERFORMANCE UNDER STANDARD TEST CONDITIONS(STC) (irradiance of 1000 W/m², spectrum AM 1.5G and cell temperature of 25°C.)

Model Number

Nominal Maximum Power (Pmax)	540 W	545 W	550 W
Power Tolerance	0 to +4.99 W	0 to +4.99 W	0 to +4.99 W
Optimum Operating Voltage (Vmp)	41.86 V	42.01 V	42.14 V
Optimum Operating Current (Imp)	12.91 A	12.98 A	13.06 A
Open Circuit Voltage (Voc)	49.78 V	49.91 V	50.06 V
Short Circuit Current (Isc)	13.53 A	13.59 A	13.65 A
Module Efficiency	20.94 %	21.13 %	21.32 %
Fill Factor	80.24 %	80.39 %	80.54 %

Note: Power Measurement uncertainty: < ±3%

PERFORMANCE UNDER NOCT(NOCT = 45.25°C irradiance of 800 W/m², ambient temperature of 20°C and Wind speed 1m/s)

Model Number

Maximum Power (Pmax)	400W	403W	407 W
Optimum Operating Voltage(Vmp)	38.54V	38.68V	38.80 V
Optimum Operating Current (Imp)	10.37A	10.43A	10.49 A
Open Circuit Voltage (Voc)	46.82V	46.94V	47.09 V
Short Circuit Current (Isc)	10.96A	11.01A	11.06 A

MECHANICAL SPECIFICATION

Dimensions (L x W x T in mm)

2278 x 1133 x 40

Weight(kg)

28.6

Cell type / No Of Cell

144 Half-cut Mono PERC Solar cells

Frame

Anodized Aluminum Alloy (6005, Temper T6, silver colour)

Front Cover

ARC coated Low Iron Tempered Glass (3.2 mm thick)

Encapsulate

Ethylene Vinyl Acetate (EVA) Sheet - PID resistant and UV resistant

Back Cover

Corona treated PVDF Fluoro-polymer Backsheet (white colour)

Junction Box

Split Junction Box (3 nos. with individual Bypass Diode) — Weatherproof (IP68)

Bypass Diode

40 A, 45 V, 200 °C max. junction temperature

Cable

4 sq. mm, 400 mm length (1200 mm available on request)

Connectors

MC4 compatible (MC4 original available on request)

Application Class Rating

Class A

Safety Class Rating

Class II

Mechanical Load Test (as per IEC & UL)

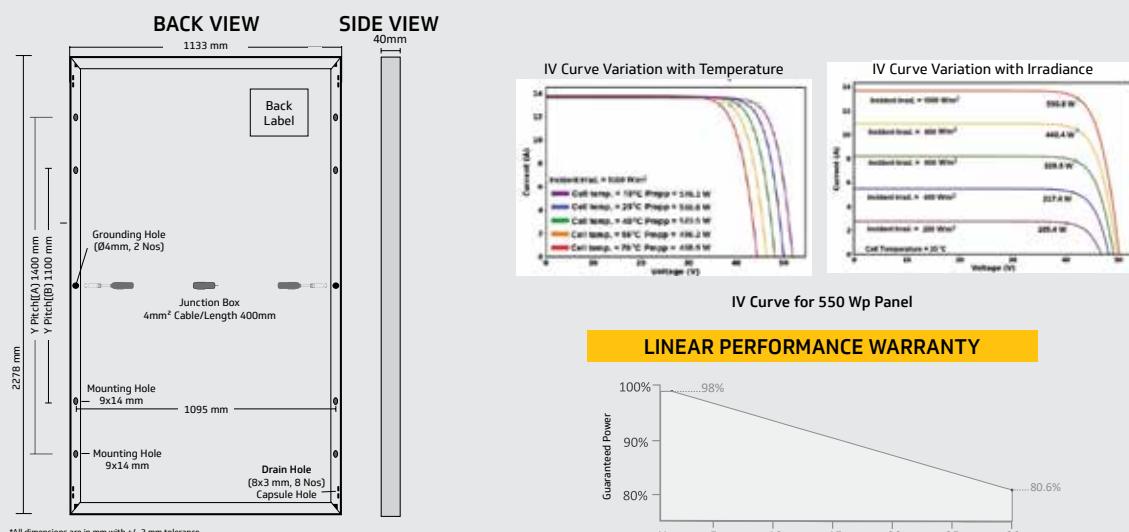
5400 Pa-Front; 2400 Pa-Back

Mounting Holes Pitch (Y)-mm

[A] 1400, [B] 1100

Mounting Holes Pitch (X)-mm

1095



MECHANICAL SPECIFICATION

Operating Temperature: -40°C to + 85°C
Maximum System Voltage: 1500V
Maximum Series Fuse Rating: 25A

TEMPERATURE SPECIFICATION

Current α (Isc): -0.0297%/°C
Voltage β (Voc): -0.2470%/°C
Power γ (Pmax): -0.3303%/°C

STACKING STANDARD

19FT

32FT

No. of Modules	192	486
No. of Pallets	8	18
Modules per Pallets/Weight	24 Nos/730 Kg	27 Nos/820 Kg
Pallet dimension	2320*1000*1275	2320*1130*1275

Caution: Please read safety and installation instructions before using the product. *Warranty: Linear performance warranty for 30 years, with degradation up to 2% in 1st year and 0.6%/year from year 2 to year 30. Please read Rayzon warranty documents thoroughly. Disclaimer: Specifications included in the datasheet are subject to change without prior notice owing to continuous innovation in the Product Development and R&D Activities. RAYZON SOLAR reserves the right to make any adjustment to the information described here. Dataset contained in this specification do not form a representative of a single module data. @T&C Apply.

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