

## PRODUCT | CERTIFICATES

- IS 14286, IEC: 61215, 61730, 62804, 61583, 61701, 62716
  - Quality Management System: ISO 9001:2015 •
- Environment Management System: ISO 14001: 2015
  - Occupational Health and Safety: ISO 45001:2018 •











## PRODUCT | KEY FEATURES

- Anti-reflective (AR) Coated Glass for Enhanced Power
- Excellent Module Efficiency with Bifacial Power Gain
- Rayzon Solar Module ensures Long-term reliability
- Positive Power Tolerance with Current Binning to Prevent Mismatch Losses

## TECHNICAL DATA

ELECTRICAL PERFORMANCE (Note: Power tolerance: 0 ~ +4.99 W. Power measurement uncertainty: < ±3%. Average value of NOCT: 45.08 ± 2 °C

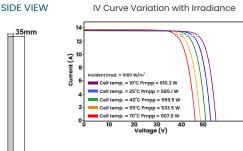
ELECTRICAL CHARACTERISTICS*	RS570144TG	C RS575144TGC	RS580144TGC	RS585144TGC	RS590144TGC
	STC NOC	T STC NOCT	STC NOCT	STC NOCT	STC NOCT
Nominal Maximum Power (Pmax)	570 W 427 W	575 W 431 W	580 W 435 W	585 W 439 W	590 W 443 W
Optimum Operating Voltage (Vmp)	44.37 V 41.67 \	44.56 V 41.85 V	44.75 V 42.03 V	44.94 V 42.2 V	45.12 V 42.37 V
Optimum Operating Current (Imp)	12.85 A 10.26 A	12.91 A 10.31 A	12.97 A 10.35 A	13.02 A 10.41 A	13.08 A 10.45 A
Open Circuit Voltage (Voc)	52.39 V 49.40	V 52.60 V 49.59 V	52.80 V 49.79 V	53.01 V 49.98 V	53.21 V 50.18 V
Short Ciruit Current (Isc)	13.54 A 10.91 A	13.59 A 10.95 A	13.65 A 11.00 A	13.71 A 11.04 A	13.76 A 11.09A
Module Efficiency	22.08 %	22.28 %	22.47 %	22.67 %	22.86 %

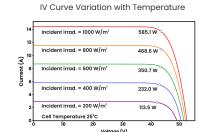
## BIFACIAL OUTPUT - BACKSIDE POWER GAIN @ STC\* [Bifaciality Factor: 80% ± 10%]

[Note: The bifacial gain depends on the power plant design and site conditions. Electrical component ratings should be selected as per actual Bifacial gain at site (module currents indicated below)]

5%	Nominal Maximum Power (Pmax)	599 W	604 W	609 W	614 W	620 W
	Module Short Circuit Current / Efficiency	14.21 A / 23.21 %	14.27 A / 23.40 %	14.33 A / 23.60 %	14.39 A / 23.79 %	14.45 A / 24.00 %
10%	Nominal Maximum Power (Pmax)	627 W	633 W	638 W	644 W	649 W
	Module Short Circuit Current / Efficiency	14.89 A / 24.29 %	14.95 A / 24.53 %	15.02 A / 24.72 %	15.08 A / 24.95 %	15.14 A / 25.14 %
25%	Nominal Maximum Power (Pmax)	713 W	719 W	725 W	731 W	738 W
	Module Short Circuit Current / Efficiency	16.92 A / 27.63 %	16.99 A / 27.86 %	17.06 A / 28.09 %	17.13 A / 28.32 %	17.20 A / 28.57 %

# Module Width 1133mm (dum, 40cs) Drain Hole 3X6mm, 16Nos Nounting Hole Sx14mm, 8Nos All dimensions are in mm with +/- 2mm tolerance.





IV Curves for Front-Side Illumination of 585 Wp Panel

## EINEAR PERFORMANCE WARRANTY 100% 99% 85% 85% 87.4%

## MECHANICAL SPECIFICATIONS

Dimensions 2278(L) x 1133(W) x 35(T)

Weight(kg) 33

Cell type / No Of Cell 144 Half-cut N-type TOPCon Bifacial Solar cells

Frame Anodized Aluminum Alloy (6005, Temper T6, Silver colour)
Front Cover Low Iron semi-Tempered AR coated Glass (2 mm thick)

Encapsulate PID resistant and UV resistant Polymeric Film
Back Cover Low Iron semi-Tempered Glass (2 mm thick)

Junction Box 30A Split Junction Box (3 nos. with individual Bypass Diode) – Weatherproof (IP68)

Bypass Diode 50 A, 45 V, 200 °C max. junction temperature

Cable 4 sq. mm, 300 mm length (Customised cable length available on request)

Connectors MC4 compatible (MC4 original available on request)

Application Class Rating Class A Safety Class Rating Class II

Mechanical Load Test 5400 Pa-Front; 2400 Pa-Back (as per IEC & UL)

Mounting Holes Pitch (Y)-mm [A] 1400, [B] 1100,

(Holes at 400 mm Y-pitch for tracker can be provided on customer request)

2278mm

Mounting Holes Pitch (X)-mm 1095

Caution: Please read safety and installation instructions before using the product. \*Warranty: Linear performance warranty for 30 years, with degradation up to 1% in 1st year and 0.4 %/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 PVT. LTD. 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.

## MAXIMUM OPERATING CONDITIONS

Operating Temperature: -40°C to +85°C
Maximum System Voltage: 1500V
Maximum Series Fuse Rating: 30 A

### TEMPERATURE COEFFICIENTS

Current  $\alpha$  (lsc) : 0.0265%/ $\dot{C}$  Voltage  $\beta$  (Voc) : -0.2261%/ $\dot{C}$  Power Y (Pmax) : -0.2909%/ $\dot{C}$ 

STACKING STANDARD	19FT	20FT	40FT	
No. of Modules per Container:	216	270	594	
No. of Pallets per Container:	08	10	22	
No. of Modules per Pallet/Weight:	27 Nos/940 Kg			
Pallet Dimensions in mm :	2320(L)*1000(W)*1275(H)			