

# RAYZON SOLAR

## L'LIOS

570 Wp - 590 Wp

N-TYPE TOPCON 16BB  
BIFACIAL (GLASS TO GLASS)

30 Years Warranty for  
Linear Performance\*



15 Years Product Warranty on  
Materials and Workmanship\*



### PRODUCT | CERTIFICATES

- 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

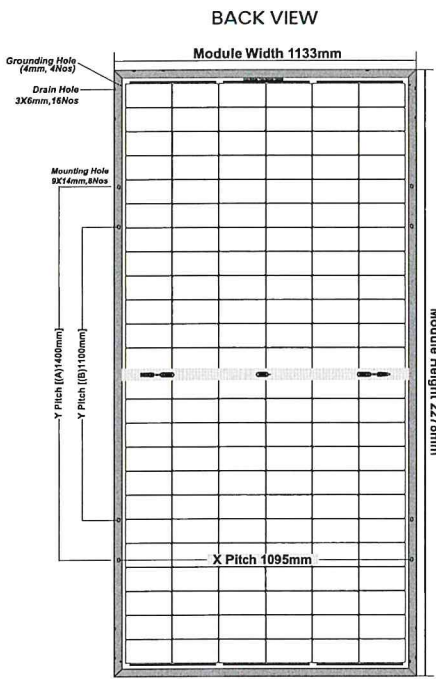
ELECTRICAL PERFORMANCE [Note: Power tolerance: 0 - +4.99 W. Power measurement uncertainty: < ±3%. Average value of NOCT: 45.08 ± 2 °C]

ELECTRICAL CHARACTERISTICS*	RSG570144TGC		RSG575144TGC		RSG580144TGC		RSG585144TGC		RSG590144TGC	
	STC	NOCT	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 V	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 Circuit 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	11.09 A
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)]

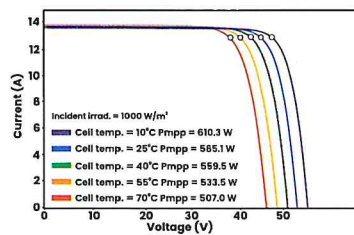
		5%	10%	25%
Nominal Maximum Power (Pmax)		599 W	627 W	713 W
Module Short Circuit Current / Efficiency		14.21 A / 23.21 %	14.89 A / 24.29 %	16.92 A / 27.63 %
Nominal Maximum Power (Pmax)		604 W	633 W	719 W
Module Short Circuit Current / Efficiency		14.27 A / 23.40 %	14.95 A / 24.53 %	16.99 A / 27.86 %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



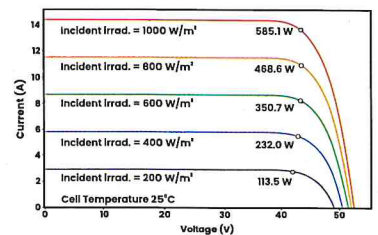
\*All dimensions are in mm with +/- 2mm tolerance.

SIDE VIEW

IV Curve Variation with Irradiance

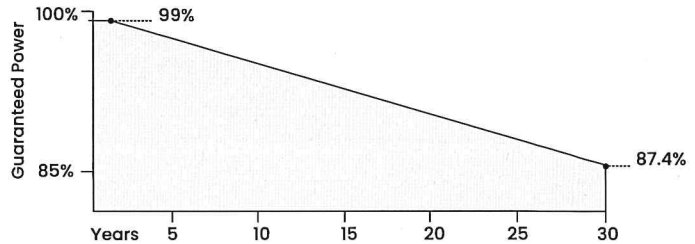


IV Curve Variation with Temperature



IV Curves for Front-Side Illumination of 585 Wp Panel

## LINEAR PERFORMANCE WARRANTY



## 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	30 A Split Junction Box (3 nos. with individual Bypass Diode) – Weatherproof (IP6B)
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)
Mounting Holes Pitch (X)-mm	1095

## MAXIMUM OPERATING CONDITIONS

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

## TEMPERATURE COEFFICIENTS

Current α (Isc) :	0.0265%/°C
Voltage β (Voc) :	-0.2261%/°C
Power γ (Pmax) :	-0.2909%/°C

## STACKING STANDARD

	20FT	40FT
No. of Modules per Container:	155	620
No. of Pallets per Container:	05	20
No. of Modules per Pallet/Weight:	31 Nos/1070 Kg	
Pallet Dimensions in mm :	2320(L)*1130(W)*1275(H)	

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.