

RAYZON SOLAR

L'LIOS

580 Wp – 600 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

IS 14286, IEC: 61215, 61730, 62804, 61853, 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

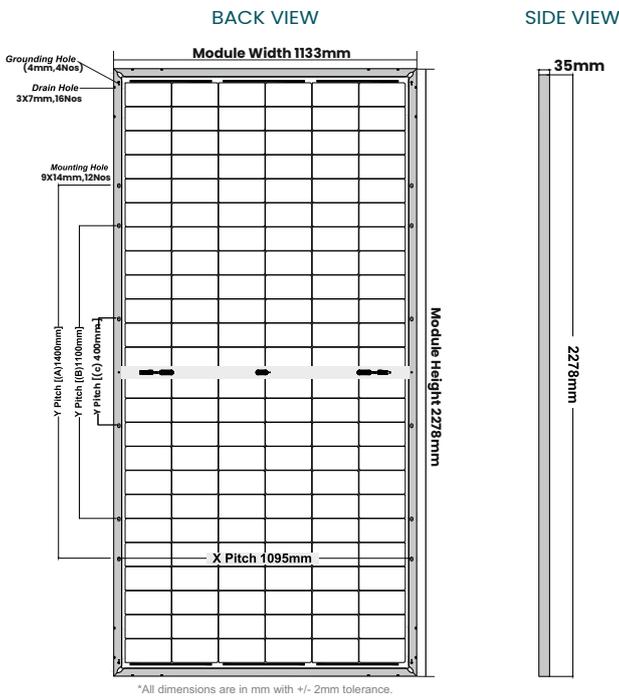
ELECTRICAL PERFORMANCE [Note: Power tolerance: 0 ~ +4.99 W. Power measurement uncertainty: < ±3%. Average value of NOCT: 45.08 ± 2 °C]

ELECTRICAL CHARACTERISTICS*	RS580144TGC		RS585144TGC		RS590144TGC		RS595144TGC		RS600144TGC	
	STC	NOCT								
Nominal Maximum Power (Pmax)	580 W	435 W	585 W	439 W	590 W	443 W	595 W	446 W	600 W	450 W
Optimum Operating Voltage (Vmp)	44.75 V	42.02 V	44.94 V	42.20 V	45.12 V	42.38 V	45.31 V	42.55 V	45.50 V	42.72 V
Optimum Operating Current (Imp)	12.97 A	10.35 A	13.03 A	10.40 A	13.08 A	10.45 A	13.14 A	10.49 A	13.20 A	10.54 A
Open Circuit Voltage (Voc)	52.80 V	49.79 V	53.01 V	49.98 V	53.21 V	50.18 V	53.42 V	50.37 V	53.62 V	50.56 V
Short Circuit Current (Isc)	13.71 A	11.05 A	13.77 A	11.10 A	13.83 A	11.14 A	13.89 A	11.19 A	13.95 A	11.24 A
Module Efficiency	22.47 %		22.67 %		22.86 %		23.05 %		23.25 %	

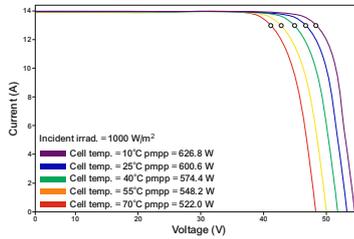
BIFACIAL OUTPUT – BACKSIDE POWER GAIN @ STC* [Bifaciality Factor: 80% ± 10%]

[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)]

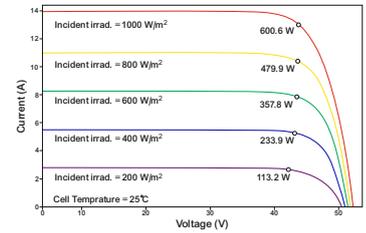
		RS580144TGC	RS585144TGC	RS590144TGC	RS595144TGC	RS600144TGC
5%	Nominal Maximum Power (Pmax)	609 W	614 W	620 W	625 W	630 W
	Module Short Circuit Current / Efficiency	14.40 A / 23.60 %	14.46 A / 23.80 %	14.52 A / 24.00 %	14.58 A / 24.21 %	14.64 / 24.41 %
10%	Nominal Maximum Power (Pmax)	638 W	644 W	649 W	655 W	660 W
	Module Short Circuit Current / Efficiency	15.08 A / 24.72 %	15.15 A / 24.93 %	15.21 A / 25.15 %	15.28 A / 25.36 %	15.34 / 25.57 %
25%	Nominal Maximum Power (Pmax)	725 W	731 W	738 W	744 W	750 W
	Module Short Circuit Current / Efficiency	17.14 A / 28.09 %	17.21 A / 28.33 %	17.29 A / 28.57 %	17.36 A / 28.82 %	17.43 / 29.06 %



IV Curve Variation with Temperature

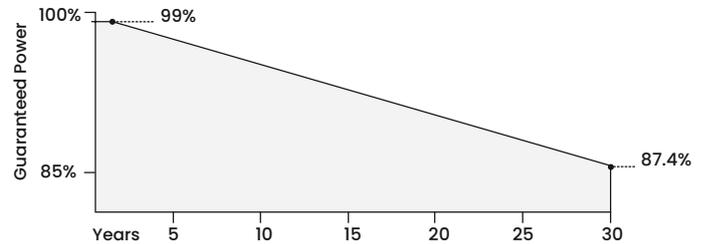


IV Curve Variation with Irradiance



IV Curves for Front-Side Illumination of 600 Wp Panel

LINEAR PERFORMANCE WARRANTY



MECHANICAL SPECIFICATIONS

Dimensions	2278(L) x 1133(W) x 35(T) in mm
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 [C] 400,
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 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 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 (31 Nos/32 Nos):	279/288	620/640
No. of Pallets per Container:	09	20
No. of Modules per Pallet/Weight:	31 Nos/1070 KG, 32 Nos/1110 Kg	
Pallet Dimensions in mm (31 Nos/32 Nos) :	2320(L)*1130(W)*1275(H)	2320(L)*1170(W)*1275(H)