

RAYZON SOLAR

L'LIOS

410 Wp - 435 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, 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]

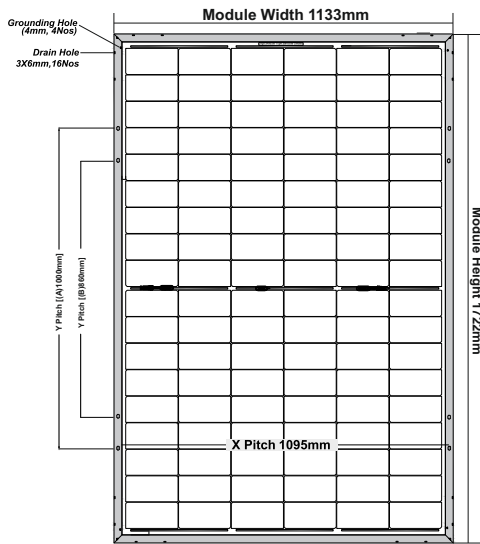
ELECTRICAL CHARACTERISTICS*	RS410108TGC		RS415108TGC		RS420108TGC		RS425108TGC		RS430108TGC		RS435108TGC	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Nominal Maximum Power (Pmax)	410 W	307 W	415 W	311 W	420 W	315 W	425 W	318 W	430 W	323 W	435 W	326 W
Optimum Operating Voltage (Vmp)	32.52 V	30.54 V	32.76 V	30.76 V	32.88 V	30.88 V	33.08 V	31.06 V	33.22 V	31.20 V	33.43 V	31.39 V
Optimum Operating Current (Imp)	12.62 A	10.08 A	12.68 A	10.12 A	12.79 A	10.21 A	12.85 A	10.26 A	12.97 A	10.35 A	13.02 A	10.40 A
Open Circuit Voltage (Voc)	38.67 V	36.47 V	38.83 V	36.61 V	39.13 V	36.90 V	39.29 V	37.05 V	39.60 V	37.34 V	39.75 V	37.48 V
Short Circuit Current (Isc)	13.30 A	10.72 A	13.35 A	10.76 A	13.47 A	10.86A	13.53 A	10.90 A	13.65 A	11.00 A	13.70 A	11.04 A
Module Efficiency	21.01 %		21.27 %		21.52 %		21.78 %		22.04 %		22.29 %	

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)	430 W	435 W	441 W	446 W	451 W	456 W
	Module Short Circuit Current / Efficiency	13.96 A / 22.04 %	14.02 A / 22.30 %	14.15 A / 22.60 %	14.21 A / 22.86 %	14.33 A / 23.12 %	14.39 A / 23.37 %
10%	Nominal Maximum Power (Pmax)	451 W	456 W	462 W	467 W	473 W	478 W
	Module Short Circuit Current / Efficiency	14.63 A / 23.12 %	14.69 A / 23.37 %	14.82 A / 23.68 %	14.89 A / 23.94 %	15.01 A / 24.24 %	15.07 A / 24.50 %
25%	Nominal Maximum Power (Pmax)	512 W	518 W	525 W	531 W	537 W	543 W
	Module Short Circuit Current / Efficiency	16.62 A / 26.24 %	16.69A / 26.55 %	16.84 A / 26.91 %	16.92 A / 27.22 %	17.06 A / 27.52 %	17.13 A / 27.83 %

BACK VIEW

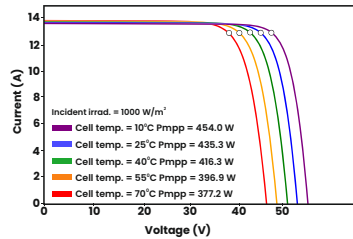


*All dimensions are in mm with +/- 2mm tolerance.

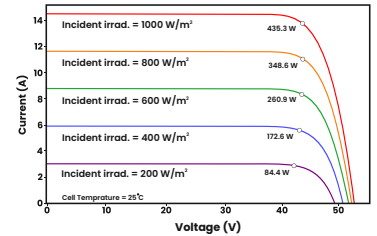
SIDE VIEW



IV Curve Variation with Temperature

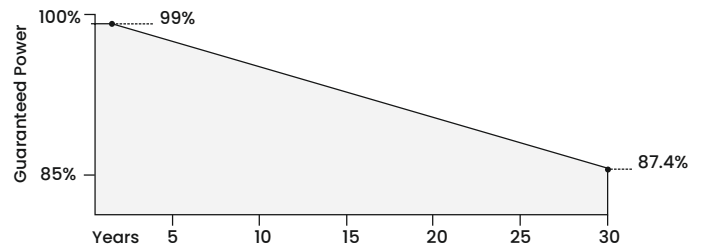


IV Curve Variation with Irradiance



IV Curves for Front-Side Illumination of 435 Wp Panel

LINEAR PERFORMANCE WARRANTY



MECHANICAL SPECIFICATIONS

Dimensions	1722(L) x 1133(W) x 35(T)
Weight(kg)	25
Cell type / No Of Cell	108 Half-cut N-type TOPCon Bifacial Solar cells
Frame	Anodized Aluminum Alloy (6005, Temper T6, Black colour)
Front Cover	Semi-Tempered AR coated Glass (2 mm thick)
Encapsulate	PID resistant and UV resistant Polymeric Film
Back Cover	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] 1000, [B] 860, (Holes at 400 mm Y-pitch for tracker can be provided on customer request)
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 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:	186	806
No. of Pallets per Container:	6	26
No. of Modules per Pallet/Weight:	31 Nos/815 Kg	
Pallet Dimensions in mm :	1770(L)*1130(W)*1275(H)	