

RAYZON SOLAR

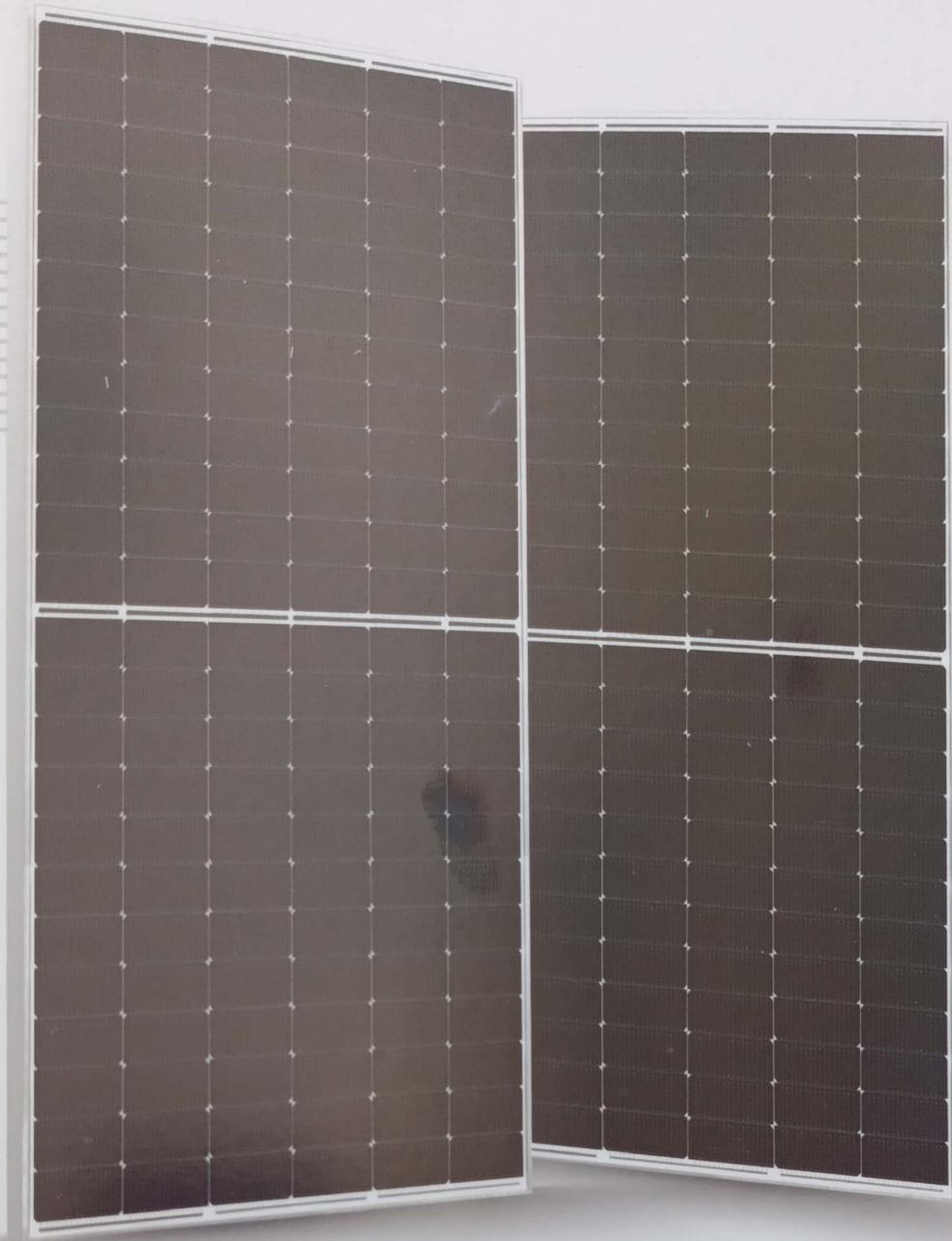


ONE OF
INDIA'S LARGEST
SOLAR PANEL
MANUFACTURERS



RENEWABLE ENERGY PARTNER





ONE OF **INDIA'S** LARGEST SOLAR PANEL MANUFACTURERS

Rayzon Solar is an experienced, dynamic, and leading solar photovoltaic modules manufacturer with a state-of-the-art facility in the vibrant state of Gujarat, India. Our vision is rooted in the belief that our customers, partners, and community should harness solar energy in a simplified way to create a brighter, more sustainable future.



Accelerating Future with

QUALITY RELIABILITY TECHNOLOGY

Photovoltaic Modules Production
Project Development
Turnkey Solutions
Solar Project EPC
Channel Partner Support

Rayzon

Expertise in Solar PV Modules
MANUFACTURING



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

www.rayzonsolar.com



TECHNICAL DATA

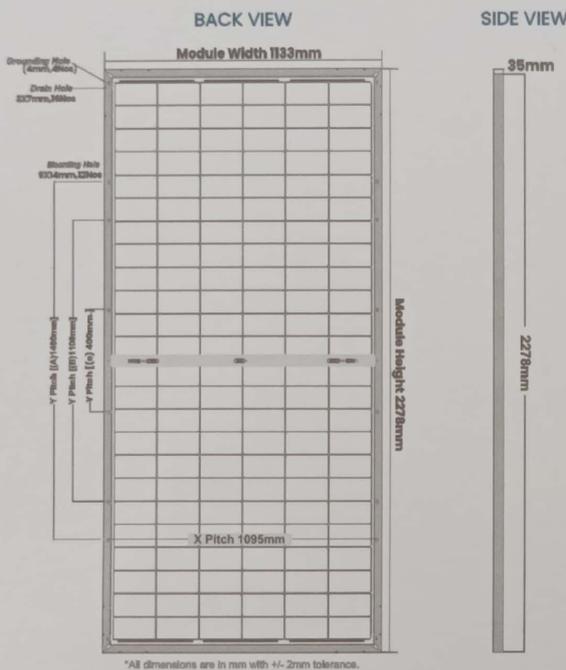
ELECTRICAL PERFORMANCE [Note: Power tolerance: 0 +4.99 W, Power measurement uncertainty: $\pm 3\%$, Average value of NOCT: $45.08 \pm 2^\circ\text{C}</math>]$

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%]

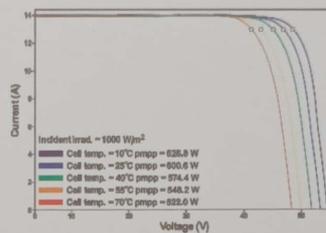
[Note: The bifacial gain depends on the power plant design and site conditions. Electrical component ratings should be selected as per actual Bifacial gain at site (module currents indicated below)]

		RS580144TGC	RS585144TGC	RS590144TGC	RS595144TGC	RS600144TGC
5%	Nominal Maximum Power (Pmax)	608 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 A / 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 A / 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 A / 29.08 %



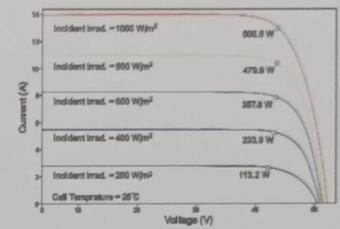
*All dimensions are in mm with ± 2 mm tolerance.

IV Curve Variation with Temperature

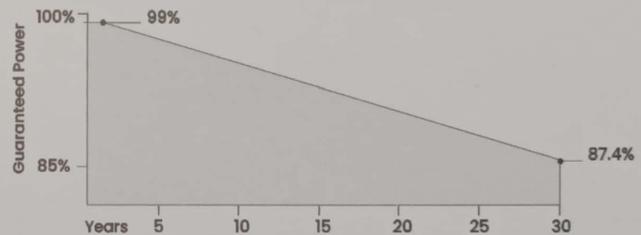


IV Curves for Front-Side Illumination of 600 Wp Panel

IV Curve Variation with Irradiance



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)

www.rayzonsolar.com



RAYZON SOLAR

L'LIOS

540 Wp - 555 Wp

MONO PERC 10BB
BIFACIAL (TRANSPARENT BACKSHEET)

30 Years Warranty for
Linear Performance*



12 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

www.rayzonsolar.com



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TECHNICAL DATA

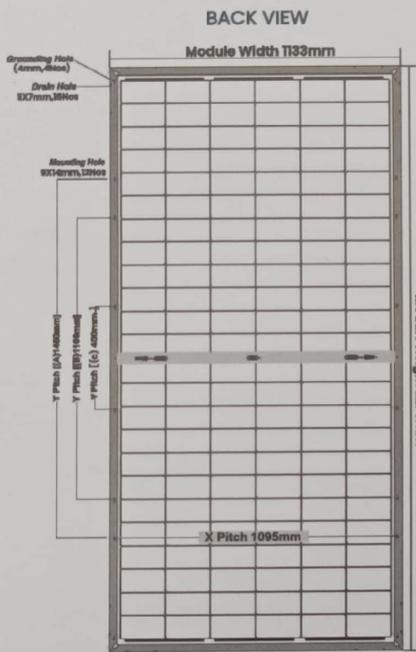
ELECTRICAL PERFORMANCE [Note: Power tolerance: 0 - +4.99 W. Power measurement uncertainty: < ±3%. Average value of NOCT: 44.51 ± 2 °C]

ELECTRICAL CHARACTERISTICS*	RSB540WC		RSB545WC		RSB550WC		RSB555WC	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Nominal Maximum Power (Pmax)	540 W	405 W	545 W	408 W	550 W	412 W	555 W	416 W
Optimum Operating Voltage (Vmp)	41.86 V	39.09 V	42.01 V	39.23 V	42.14 V	39.35 V	42.28 V	39.48 V
Optimum Operating Current (Imp)	12.91 A	10.36 A	12.98 A	10.41 A	13.06 A	10.48 A	13.13 A	10.53 A
Open Circuit Voltage (Voc)	49.78 V	46.67 V	49.91 V	46.80 V	50.06 V	46.94 V	50.20 V	47.07 V
Short Circuit Current (Isc)	13.53 A	10.90 A	13.59 A	10.95 A	13.65 A	11.00 A	13.71 A	11.05 A
Module Efficiency	20.94 %		21.13 %		21.32 %		21.52 %	

BIFACIAL OUTPUT – BACKSIDE POWER GAIN @ STC* [Bifaciality Factor: 75% ± 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)]

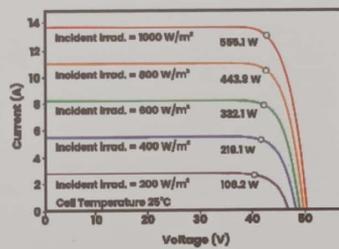
		RSB540WC	RSB545WC	RSB550WC	RSB555WC
5%	Nominal Maximum Power (Pmax)	567 W	573 W	578 W	583 W
	Module Short Circuit Current / Efficiency	14.21 A / 21.99 %	14.27 A / 22.18 %	14.33 A / 22.39 %	14.39 A / 22.59 %
10%	Nominal Maximum Power (Pmax)	594 W	600 W	605 W	611 W
	Module Short Circuit Current / Efficiency	14.88 A / 23.03 %	14.95 A / 23.24 %	15.02 A / 23.46 %	15.08 A / 23.67 %
25%	Nominal Maximum Power (Pmax)	676 W	682 W	688 W	694 W
	Module Short Circuit Current / Efficiency	16.81 A / 26.17 %	16.99 A / 26.41 %	17.06 A / 26.65 %	17.14 A / 26.89 %



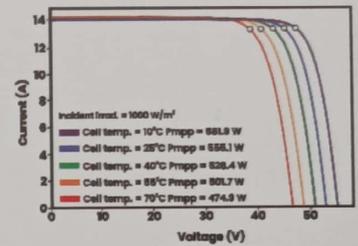
*All dimensions are in mm with +/- 2mm tolerance.

SIDE VIEW

IV Curve Variation with Irradiance

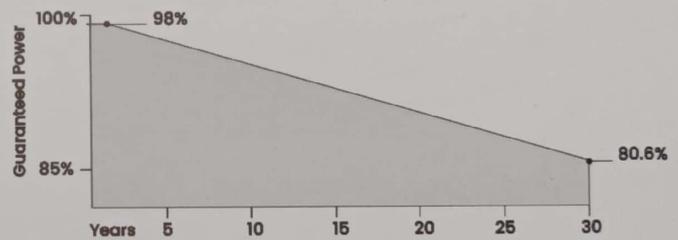


IV Curve Variation with Temperature



IV Curves for Front-Side Illumination of 555 Wp Panel

LINEAR PERFORMANCE WARRANTY



MECHANICAL SPECIFICATIONS

Dimensions	2278(L) x 1133(W) x 40(T) in mm
Weight (kg)	28.6
Cell type / No Of Cell	144 Half-cut Mono PERC Bifacial 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) – PID resistant and UV resistant
Back Cover	Corona treated PVDF Fluoro-polymer based transparent Backsheet
Junction Box	25A Split type (3 nos. with individual Bypass Diode) – Weatherproof (IP68)
Bypass Diode	40 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

MAXIMUM OPERATING CONDITIONS

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

TEMPERATURE COEFFICIENTS

Current α (Isc) :	0.0284%/°C
Voltage β (Voc) :	-0.2444%/°C
Power γ (Pmax) :	-0.3210%/°C

STACKING STANDARD

	19FT	20FT	40FT
No. of Modules per Container:	192	288	528
No. of Pallets per Container:	08	12	22
No. of Modules per Pallet/Weight:	24 Nos/ 730 Kg		
Pallet Dimensions in mm :	2320(L)*1000(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 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 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.

www.rayzonsolar.com



RAYZON SOLAR

L'LIOS

610 Wp - 625 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

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TECHNICAL DATA

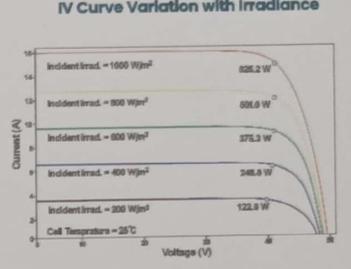
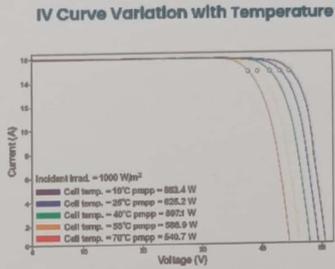
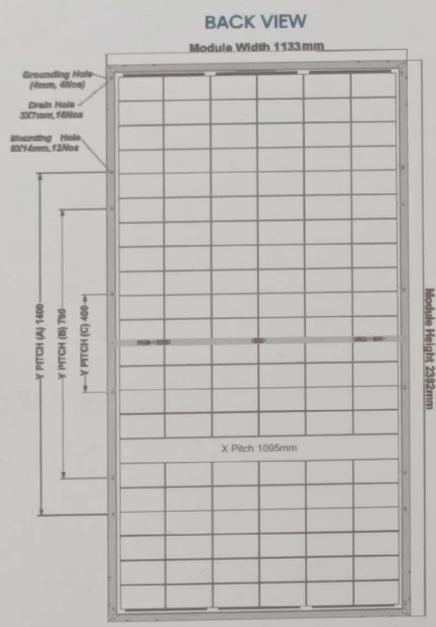
ELECTRICAL PERFORMANCE [Note: Power tolerance: 0 ~ +4.99 W. Power measurement uncertainty: $\pm 3\%$. Average value of NOCT: 45.08 $\pm 2^{\circ}\text{C}$]

ELECTRICAL CHARACTERISTICS*	RS610132TGC		RS615132TGC		RS620132TGC		RS625132TGC	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Nominal Maximum Power (Pmax)	610 W	457 W	615 W	481 W	620 W	465 W	625 W	468 W
Optimum Operating Voltage (Vmp)	40.95 V	38.45 V	41.18 V	38.67 V	41.37 V	38.85 V	41.52 V	38.99 V
Optimum Operating Current (Imp)	14.91 A	11.90 A	14.95 A	11.93 A	15.00 A	11.97 A	15.06 A	12.02 A
Open Circuit Voltage (Voc)	48.54 V	45.77 V	48.68 V	45.91 V	48.92 V	46.13 V	49.18 V	46.38 V
Short Circuit Current (Isc)	15.66 A	12.62 A	15.89 A	12.65 A	15.72 A	12.67 A	15.73 A	12.68 A
Module Efficiency	22.60 %		22.79 %		22.97 %		23.16 %	

BIFACIAL OUTPUT – BACKSIDE POWER GAIN @ STC* [Bifaciality Factor: 80% \pm 05%]

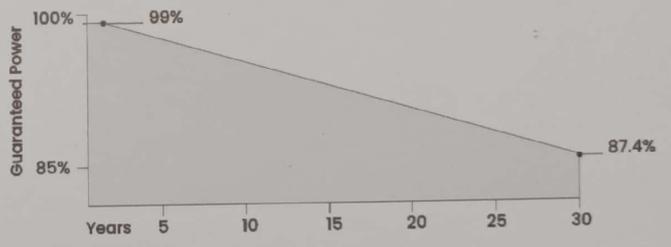
[Note: The bifacial gain depends on the power plant design and site conditions. Electrical component ratings should be selected as per actual Bifacial gain at site (module currents indicated below)]

		RS610132TGC	RS615132TGC	RS620132TGC	RS625132TGC
5%	Nominal Maximum Power (Pmax)	640 W	645 W	651 W	656 W
	Module Short Circuit Current / Efficiency	16.44 A / 23.73 %	16.48 A / 23.93 %	16.50 A / 24.12 %	16.52 A / 24.32 %
10%	Nominal Maximum Power (Pmax)	671 W	676 W	682 W	687 W
	Module Short Circuit Current / Efficiency	17.23 A / 24.86 %	17.26 A / 25.07 %	17.29 A / 25.27 %	17.30 A / 25.47 %
25%	Nominal Maximum Power (Pmax)	762 W	768 W	775 W	781 W
	Module Short Circuit Current / Efficiency	19.59 A / 28.25 %	19.62 A / 28.48 %	19.85 A / 28.72 %	19.86 A / 28.95 %



IV Curves for Front-Side Illumination of 625 Wp Panel

LINEAR PERFORMANCE WARRANTY



MECHANICAL SPECIFICATIONS

Dimensions	2382(L) x 1133(W) x 35(T) in mm
Weight(kg)	34.5
Cell type / No Of Cell	132 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	35A Split Junction Box (3 nos. with individual Bypass Diode) – Weatherproof (IP68)
Bypass Diode	45 V, 200 $^{\circ}\text{C}$ 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] 790, [C] 400
Mounting Holes Pitch (X)-mm	1095

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MAXIMUM OPERATING CONDITIONS

Operating Temperature:	-40 $^{\circ}\text{C}$ to +85 $^{\circ}\text{C}$
Maximum System Voltage:	1500V
Maximum Series Fuse Rating:	35 A

TEMPERATURE COEFFICIENTS

Current α (Isc) :	0.0350%/ $^{\circ}\text{C}$
Voltage β (Voc) :	-0.2277%/ $^{\circ}\text{C}$
Power γ (Pmax) :	-0.2827%/ $^{\circ}\text{C}$

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/1130 Kg, 32 Nos/1165 Kg	
Pallet Dimensions in mm (31 Nos/32 Nos) :	2420(L)*1130(W)*1275(H)/	2420(L)*1170(W)*1275(H)

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RAYZON SOLAR

L'LIOS

540 Wp - 555 Wp

MONO PERC 10BB
MONOFACIAL

30 Years Warranty for
Linear Performance*



12 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 reflective white backsheet
- Rayzon Solar Module ensures Long-term reliability
- Positive Power Tolerance with Current Binning to Prevent Mismatch Losses

www.rayzonsolar.com



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TECHNICAL DATA

ELECTRICAL PERFORMANCE [Note: Power tolerance: 0 - +4.88 W, Power measurement uncertainty: $\pm 3\%$.]

PERFORMANCE UNDER STANDARD TEST CONDITIONS (STC)

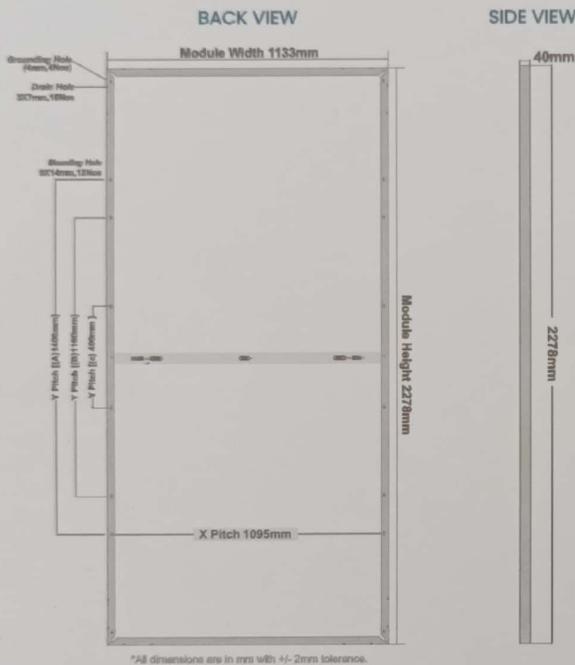
(Irradiance of 1000 W/m², spectrum AM 1.5G and cell temperature of 25°C.)

	RS540WC	RS545WC	RS550WC	RS555WC
Nominal Maximum Power (P _{max})	540 W	545 W	550 W	555 W
Optimum Operating Voltage (V _{mp})	41.86 V	42.01 V	42.14 V	42.28 V
Optimum Operating Current (I _{mp})	12.91 A	12.98 A	13.06 A	13.13 A
Open Circuit Voltage (V _{oc})	49.78 V	49.91 V	50.06 V	50.20 V
Short Circuit Current (I _{sc})	13.53 A	13.59 A	13.65 A	13.71 A
Module Efficiency	20.94 %	21.13 %	21.32 %	21.51 %
Fill Factor	80.24 %	80.39 %	80.54 %	80.66 %

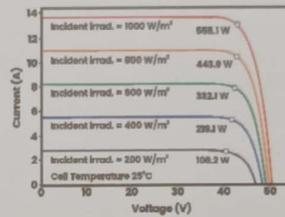
PERFORMANCE UNDER NOCT

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

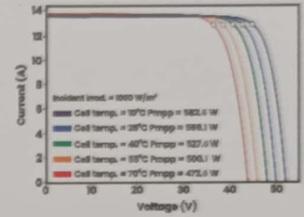
	RS540WC	RS545WC	RS550WC	RS555WC
Nominal Maximum Power (P _{max})	400 W	403 W	407 W	411 W
Optimum Operating Voltage (V _{mp})	38.54 V	38.66 V	38.80 V	38.93 V
Optimum Operating Current (I _{mp})	10.37 A	10.43 A	10.49 A	10.55 A
Open Circuit Voltage (V _{oc})	46.82 V	46.94 V	47.08 V	47.21 V
Short Circuit Current (I _{sc})	10.98 A	11.01 A	11.06 A	11.11 A



IV Curve Variation with Irradiance

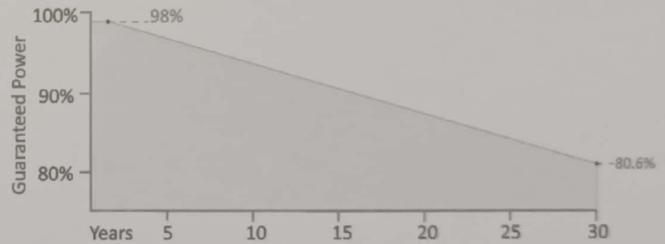


IV Curve Variation with Temperature



IV Curves for Front-Side Illumination of 555Wp Panel

LINEAR PERFORMANCE WARRANTY



MECHANICAL SPECIFICATIONS

Dimensions	2278(L) x 1133(W) x 40(T) in mm
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 Vinly Acetate (EVA) Sheet - PID resistant and UV resistant
Back Cover	Corona treated PVDF Fluoro-polymer Backsheet (white colour)
Junction Box	25A 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, 300 mm length (Customized 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

MAXIMUM OPERATING CONDITIONS

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

TEMPERATURE COEFFICIENTS

Current α (I _{sc}):	0.0297% / °C
Voltage β (V _{oc}):	-0.2470% / °C
Power γ (P _{max}):	-0.3303% / °C

STACKING STANDARD

	19FT	20FT	40FT
No. of Modules per Container:	192	288	528
No. of Pallets per Container:	08	12	22
No. of Modules per Pallet/Weight:	24 Nos/730 Kg		
Pallet Dimensions in mm:	2320(L)*1000(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 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 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.

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