

## Solar Modules MONO PERC 10BB 540W - 550W

Bifacial

### THE INDUSTRY'S BENCHMARK

Rayzon Solar is an internationally renowned leading solar energy cost effective befitting solutions provider having core competency in high efficiency PV module manufacturing and MW level solution provider. Rayzon PV modules are the best in class in terms of power output and long-term reliability.

### PRODUCT | KEY FEATURES

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Anti-Reflective (AR) Coated Glass for Enhanced Power
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Excellent Module Efficiency with Bifacial Power Gain
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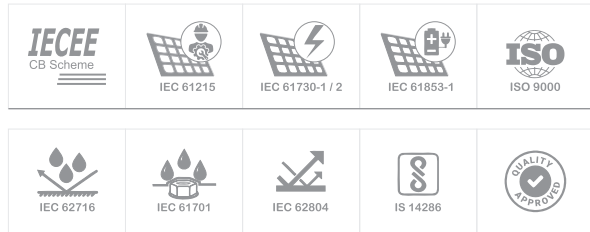
High Reliability with Multi Busbar Technology
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Pre and Post EL Checking to ensure defect free modules
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IP68 Junction Box for Long Term Endurance
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100% Hi-Pot Testing to Ensure Safety

### PRODUCT CERTIFICATES



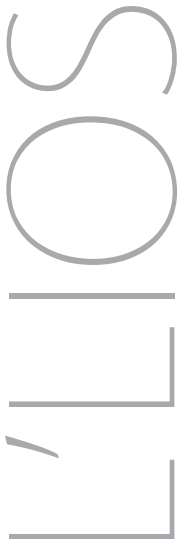
### MADE IN INDIA

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Industry leading linear power output warranty\*
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Product warranty on materials and workmanship\*\*

\* First year power degradation warranty shall be 2% and linear power warranty from year 2 to year 30.  
 \*\*15 years product warranty for Dual Glass modules and 12 years product warranty for modules with transparent backsheets.



# TECHNICAL DATA – DUAL GLASS

ELECTRICAL PERFORMANCE [Note: Power tolerance: 0 ~ +5 W. Power Measurement uncertainty : <±3%]

Model number	RS540WC		RS545WC		RS550WC	
	STC	NOCT	STC	NOCT	STC	NOCT
Nominal Maximum Power (Pmax)	540 W	400 W	545 W	403 W	550 W	407 W
Optimum Operating Voltage (Vmp)	41.86 V	38.54 V	42.01 V	38.68 V	42.14 V	38.80 V
Optimum Operating Current (Imp)	12.91 A	10.37 A	12.98 A	10.43 A	13.07 A	10.49 A
Open Circuit Voltage (Voc)	49.78 V	46.82 V	49.91 V	46.94	50.06 V	47.09 V
Short Circuit Current (Isc)	13.53 A	10.96 A	13.59 A	11.01	13.65 A	11.06 A
Module Efficiency(%)	20.94 %		21.13 %		21.32 %	

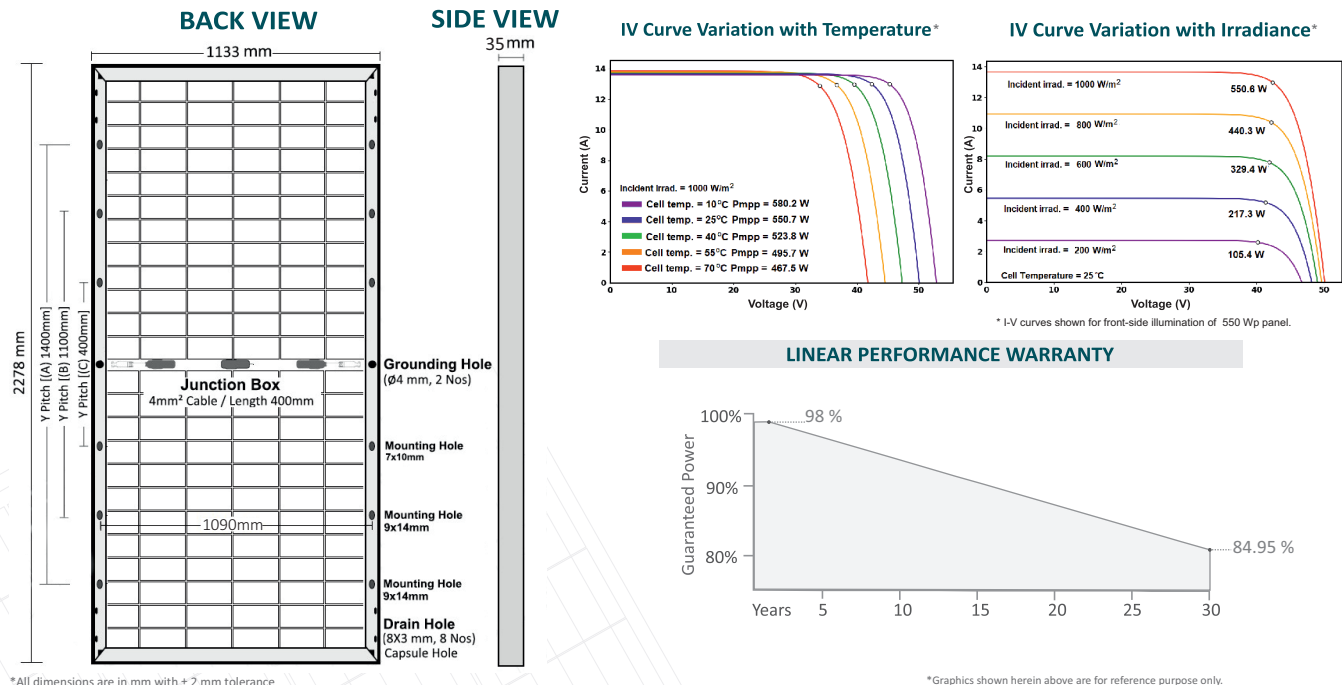
## BI-FACIAL OUTPUT - BACKSIDE POWER GAIN @ STC\* [Bifaciality Factor: 70% ± 5%]

[Note: The bifacial gain depends on the power plant design and site conditions.]

		RS540WC	RS545WC	RS550WC
5%	Nominal Maximum Power (Pmax)	567 W	573 W	578 W
	Module Efficiency (%)	21.99 %	22.18 %	22.39 %
10%	Nominal Maximum Power (Pmax)	594 W	600 W	605 W
	Module Efficiency (%)	23.03 %	23.24 %	23.46 %
25%	Nominal Maximum Power (Pmax)	676 W	682 W	688 W
	Module Efficiency (%)	26.17 %	26.41 %	26.65 %

## Mechanical Specifications

Dimensions (L x W x T in mm)	2278 x 1133 x 35
Weight (Kg)	33
No Of Cell	144[12x6 / 12x6]
Frame	Anodized Aluminum Alloy (6063, Temper T5, Silver Color)
Front Cover	Low Iron Heat-strengthened AR Coated Glass (2 mm thick)
Encapsulate	PID Free and UV Resistant polymeric film
Back Cover	Low Iron Heat-strengthened Glass (2mm thick)
Junction Box	Split Junction Box ( 3 nos. with Bypass Diodes) - Weatherproof (IP68) / MC4 compatible
Application Class Rating	Class A
Safety Class Rating	Class II
Mechanical Load Test (as per IEC & UL)	5400 Pa-Front; 2400 Pa-Back
Mounting Holes Pitch (Y)-mm	[A] 1400 mm [B] 1100mm [C] 400 mm
Mounting Holes Pitch (X)-mm	1090mm



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

\*Graphics shown herein above are for reference purpose only.

### MAXIMUM OPERATING CONDITIONS

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

### TEMPERATURE COEFFICIENTS

Current Temperature coefficients $\alpha(Isc)$ :	0.0271 %/ C
Voltage Temperature coefficients $\beta(Voc)$ :	-0.2355 %/ C
Power Temperature coefficients $\gamma(Pmax)$ :	-0.3164 %/ C

### STACKING STANDARD 40FT HC

No. of Modules	620
No of Pallets	20
Modules per Pallet / Weight	31 Nos /1070 Kgs.
Pallet dimensions	2320*1130*1295

**Caution:** Please read safety and installation instructions before using the product. **\*Warranty:** Linear Power warranty for 30 years, with degradation up to 2% in the 1st year and linear power degradation rate of 0.45 %/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 conditions innovation on the product Development and R&D Activities. RAYZON SOLAR PRIVATE LIMITED reserves the right to make any adjustment to the information described here with Data set contained in this specification do not form a representative of a single module data. @T&C Apply.

# TECHNICAL DATA – TRANSPARENT BACKSHEET

ELECTRICAL PERFORMANCE [Note: Power tolerance: 0 ~ +5 W. Power Measurement uncertainty : <math>\pm 3\%</math>]

Model number	RS540WC		RS545WC		RS550WC	
	STC	NOCT	STC	NOCT	STC	NOCT
Nominal Maximum Power (Pmax)	540 W	400 W	545 W	403 W	550 W	407 W
Optimum Operating Voltage (Vmp)	41.86 V	38.54 V	42.01 V	38.68 V	42.14 V	38.80 V
Optimum Operating Current (Imp)	12.91 A	10.37 A	12.98 A	10.43 A	13.07 A	10.49 A
Open Circuit Voltage (Voc)	49.78 V	46.82 V	49.91 V	46.94 V	50.06 V	47.09 V
Short Circuit Current (Isc)	13.53 A	10.96 A	13.59 A	11.01 A	13.65 A	11.06 A
Module Efficiency(%)	20.94 %		21.13 %		21.32 %	

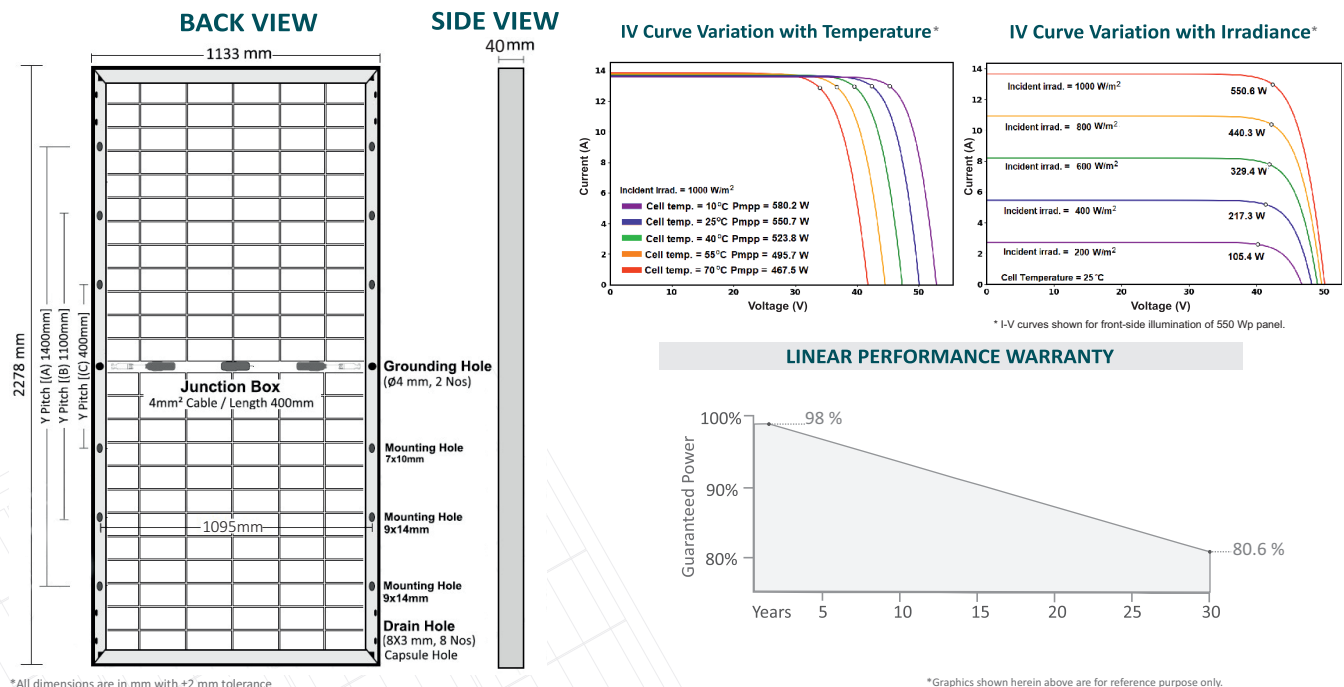
## BI-FACIAL OUTPUT - BACKSIDE POWER GAIN @ STC\* [Bifaciality Factor: 70% ± 5%]

[Note: The bifacial gain depends on the power plant design and site conditions.]

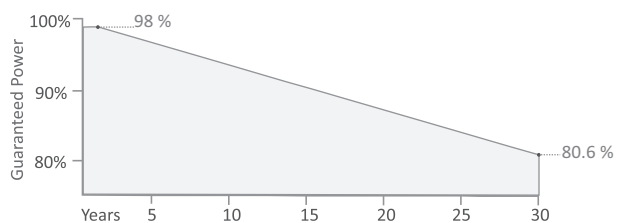
Gain	Parameter	RS540WC	RS545WC	RS550WC
5%	Nominal Maximum Power (Pmax)	567 W	573 W	578 W
	Module Efficiency (%)	21.99 %	22.18 %	22.39 %
10%	Nominal Maximum Power (Pmax)	594 W	600 W	605 W
	Module Efficiency (%)	23.03 %	23.24 %	23.46 %
25%	Nominal Maximum Power (Pmax)	676 W	682 W	688 W
	Module Efficiency (%)	26.17 %	26.41 %	26.65 %

## Mechanical Specifications

Dimensions (L x W x T in mm)	2278 x 1133 x 40
Weight (Kg)	28.6
No Of Cell	144[12x6 / 12x6]
Frame	Anodized Aluminum Alloy (6063, Temper T5, Silver Color)
Front Cover	Low Iron AR Coated Tempered Glass (3.2 mm thick)
Encapsulate	PID Free and UV Resistant polymeric film
Back Cover	Fluoro-polymer based transparent polymeric sheet
Junction Box	Split Junction Box ( 3 nos. with Bypass Diodes) - Weatherproof (IP68) / MC4 compatible
Application Class Rating	Class A
Safety Class Rating	Class II
Mechanical Load Test (as per IEC & UL)	5400 Pa-Front; 2400 Pa-Back
Mounting Holes Pitch (Y)-mm	[A] 1400 mm [B] 1100mm [C] 400 mm
Mounting Holes Pitch (X)-mm	1095mm



## LINEAR PERFORMANCE WARRANTY



\*Graphics shown herein above are for reference purpose only.

## MAXIMUM OPERATING CONDITIONS

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

## TEMPERATURE COEFFICIENTS

Current $\alpha$ (Isc) :	0.0271 % / C
Voltage $\beta$ (Voc) :	-0.2355 % / C
Power $\gamma$ (Pmax) :	-0.3164 % / C

## STACKING STANDARD

	19FT	32FT
No. of Modules	192 Nos	432 Nos
No. of Pallets	8 Pallets	16 Pallets
Modules per Pallet / Weight	24 Nos/730 Kg.	27 Nos/820 Kg.
Pallet dimensions	2320*1000*1275	2320*1130*1275

**Caution:** Please read safety and installation instructions before using the product. **\*Warranty:** Linear power 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 conditions innovation on the product Development and R&D Activities. RAYZON SOLAR PRIVATE LIMITED reserves the right to make any adjustment to the information described here with Data set contained in this specification do not form a representative of a single module data. @T&C Apply.