

MONOPERC
TRANSPARENT BACKSHEET BIFACIAL
(540wp to 555wp) NO OF CELLS - 144

555 w

MAXIMUM MODULE POWER

21.52 %

MAXIMUM MODULE EFFICIENCY

Rhine
LET'S GO SOLAR

10+
Yrs
of
RELIABILITY



"CLEANER ENERGY
CLEANER TOMORROW"

HIGH ENERGY OUTPUT

ROBUST DESIGN FOR HIGH CRACK TOLERANCE

LOW TEMP. COEFFICIENT (-0.26%/°C),
FOR HIGH YIELD IN HOT WEATHER

POSITIVE POWER TOLERANCE

LOWER SYSTEM COST & LCOE

PRODUCT CERTIFICATIONS*
IS14286, IEC 61215 : 2015, IEC 61730,
IS/IEC61730, IEC61701, IEC62716,
IEC60068-2-68, IEC 62804, IEC 61853

FACILITY CERTIFICATES
ISO 9001 : 2015 - QUALITY MANAGEMENT SYSTEM
ISO 14001 : 2015 - ENVIRONMENT MANAGEMENT SYSTEM
ISO 45001 : 2018 - OCCUPATIONAL HEALTH AND SAFETY



**ALMM
APPROVED**



CRS-2021-3499
R-91008249



DCR

TECHNICAL DATA SHEET

MONO PERC 144 CELL - 540-555W (G TO B)

ELECTRICAL PARAMETERS I STC

Peak Power P _{max} (Wp)	540	545	550	555
Maximum Voltage V _{mpp} (V)	41.86	42.01	42.14	42.28
Maximum Current I _{mp} (A)	12.91	12.98	13.06	13.13
Open Circuit Voltage V _{oc} (V)	49.78	49.91	50.06	50.2
Short Circuit Current I _{sc} (A)	13.53	13.59	13.65	13.71
Module Efficiency (%)	20.94	21.13	21.32	21.52

1) STC:1000W/M² IRRADIANCE, 25°C CELL TEMPERATURE, AM 1.5G SPECTRUM ACCORDING TO EN 60904-3 I (2) TOLERANCE OF RATING AT STC (PMPP/ISC) [%] : 0-3/±5I ELECTRICAL MEASUREMENT UNCERTAINTY IS WITHIN ±2%

ELECTRICAL PARAMETERS I NOCT

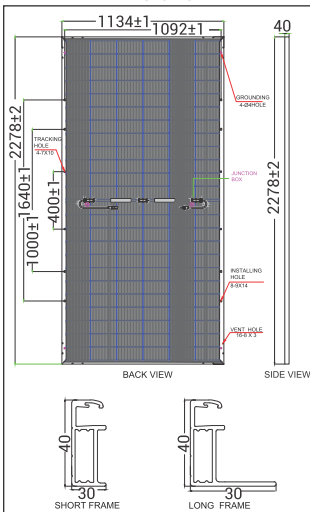
Peak Power P _{max} (Wp)	405	408	412	416
Maximum Voltage V _{mpp} (V)	39.09	39.23	39.35	39.48
Maximum Current I _{mp} (A)	10.36	10.41	10.48	10.53
Open Circuit Voltage V _{oc} (V)	46.67	46.80	46.94	47.07
Short Circuit Current I _{sc} (A)	10.90	10.95	11.00	11.05

BIFACIAL OUTPUT - BACKSIDE POWER GAIN @STC* (Bifacial Factor : 75%±10%)

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	16.91 / 26.17 %	16.99 / 26.41 %	17.06 / 26.65 %	17.14 / 26.79 %

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

DIMENSIONS IN MM

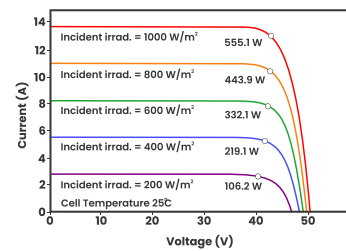


MECHANICAL DATA

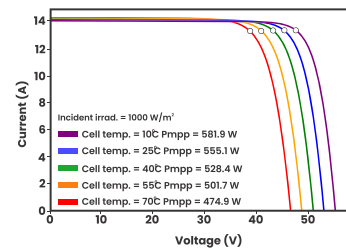
Solar Cells	Mono Perc bifacial solar cell
No. of cells	144 Half Cut Solar Cells
Module imensions	2278x1134x40 mm
Weight	28.6 kg
Front Glass	3.2 mm (0.125 inches) AR Coating Semi-Tempered Glass
Frame	40 mm (1.57 inches) Anodized Aluminium Alloy
J-Box	IP 68 rated
Cables	Photovoltaic Technology Cable 4.0 mm ² (0.006 inches) Length can be customized
Connector	TS4 Plus / TS4
Application Class	Class A (Safety Class II)

IV CURVE

IV Curve Variation with Irradiance

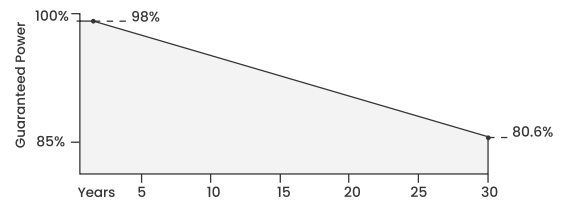


IV Curve Variation with Temperature



IV Curves for Front-Side Illumination of 555 Wp Panel

LINEAR PERFORMANCE WARRANTY



PERMISSIBLE OPERATING CONDITION

Temperature Range	-40°C to + 85°C
Maximum System Voltage	1500 VDC
NOCT	45±2°C
Hail Resistance	Max. diameter of 25 mm with velocity 23 m/s

TEMPERATURE COEFFICIENTS (TC)

Temperature Coefficients - β (Voc)	-0.26%/°C
Temperature Coefficients - α(Isc)	0.050%/°C
Temperature Coefficients - γ (Pmax)	-0.30%/°C

PACKING STANDARD

	20 FT	40 FT
No. of Modules per Container.	288	528
No. of Pallets per Container.	12	22
No. of Module per Pallet/Weight :	24 Nos	
Pallet Dimensions in mm :	2320 (L)*1130(W)*1275(H)	

WARRANTY

Product Warranty**	12 years
Performance Warranty **	Linear Power Warranty for 30 years with 1% for 1st year degradation and 0.4% from 2 nd year to year 30

* The specifications and key features contained in this datasheet may deviate slightly from our actual products due to the on-going product innovation. RHINE SOLAR LTD. have the right to make necessary changes at any time without further notice.

Please be kindly advised that PV modules should be handled and installed by qualified installer and please carefully read the safety and installation instructions before using our PV modules.

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