

144 SERIES

MONO CRYSTALLINE
525 Wp to 550 Wp

PAHAL[®]

SOLAR

Solar PV Module Manufacturer



Certifications



Salient Features



AR Coated
Tempered Glass.



Pre & Post EL
checking to ensure
defect free modules.



IP68 High
Quality
Junction Box



High
Renumeration
on Savings.



Optimum Raw
Materials for best
quality & reliability

PAHAL SOLAR's Exclusive Linear High Performance Warranty

PRODUCT WARRANTY

10 years

PERFORMANCE WARRANTY

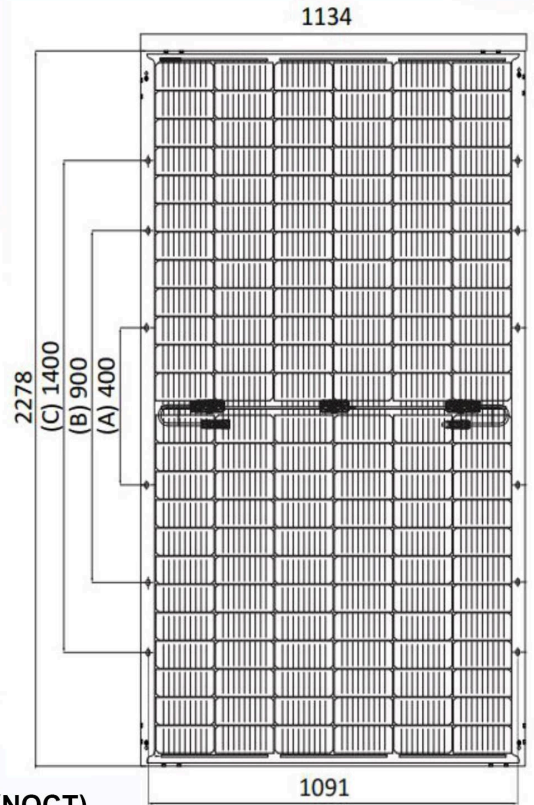
Output power 90% for 10 years
and 80% for 27 years

Electrical Parameters

● PERFORMANCE UNDER STANDARD TEST CONDITIONS (STC)

(Irradiance of 1000 W/m², Spectrum AM 1.5 and Cell Temperature of 25°C)

Model Number	PS_525	PS_530	PS_535	PS_540	PS_545	PS_550
Capacity Rating - Pmax (Wp)	525	530	535	540	545	550
+Ve Power Tolerance (W)	0-5	0-5	0-5	0-5	0-5	0-5
Rated Voltage - Vmp (V)	40.80	40.94	41.10	41.36	41.62	41.87
Rated Current - Imp (A)	12.87	12.95	13.03	13.07	13.10	13.14
Open Circuit Voltage (Voc)	48.87	49.04	49.21	49.41	49.61	49.81
Short Circuit Current (Isc)	13.63	13.76	13.83	13.89	13.94	14.00
Module Efficiency (%)	20.35	20.53	20.73	20.92	21.11	21.30



● PERFORMANCE UNDER NOMINAL OPERATING CELL TEMPERATURE (NOCT)

(NOCT Irradiance of 800 W/m², Ambient Temperature of 20°C, Wind speed 1m/s, Average NOCT = 45 ± 2°C)

Capacity Rating - Pmax (Wp)	389	393	396	400	404	407
Rated Voltage - Vmp (V)	38.65	38.31	38.96	39.20	39.45	39.69
Rated Current - Imp (A)	10.05	10.12	10.17	10.20	10.23	10.26
Open Circuit Voltage (Voc)	46.32	46.49	46.65	46.84	47.03	47.22
Short Circuit Current (Isc)	10.64	10.75	10.80	10.84	10.89	10.93

Temperature Co-efficients

- Tk Isc %/°C 0.0264
- Tk Voc %/°C -0.0316
- Tk Pmax%/°C -0.3106

Mechanical Specifications

Matrix / No. of Cells	2X12X6/144
Cell Size (mm)	182X91
Cell Busbar	10
Dimensions (LXWXT) (mm)	2278X1134X40
Weight (kg)	28
Frame	Silver Anodized Aluminium Alloy
Glass	ARC Coated Low Iron Tempered
Encapsulate	EVA Sheet (PID free and UV Resistant)
Backsheet	PVDF Based Composite Film
Junction Box	Split JB - IP68, MC4 Compatible
Application Class Rating	Class A
Safety Class Rating	Class II
Mechanical Load Test	5400 Pa - Front / 2400 Pa - Back
X-Pitch (mm)	1091
Y-Pitch (mm)	(A) 400 (B) 900 (C) 1400

Max. Operating Conditions

- Operating Temperature -40°C to +85°C
- Max.System Voltage 1500 V
- Max.Series Fuse Rating 25 A
- NOCT Temperature 45 ± 2

Packing Standard

Frame Size	40 mm	
Vehicle	19 ft	32 ft
No. of Modules	192	432
No. of Pallets	8	16
Module per Pallet/ Weight	24/672	27/756

