

AR M10R 144N
570-590 WP

570Wp | 575Wp | 580 Wp
585 Wp | 590 Wp



Power Tolerance
+4.99 Wp



Efficiency Up To
22.84%



Module Warranty
12 Years



Output Warranty
30 Years

Key Features



Rigorous Testing Criteria
100% EL Inspection ensuring defect-free modules.



PID Resistance
With long-term reliability.



Better Performance
Even at low irradiation.



Maximum System Voltage:
1500 V DC.



Withstand up to 5400 Pa
Snow load resistance.



Increased String Length &
Low BOS Cost



Withstand up to 2400 Pa
Wind load resistance.



Maximum System Voltage
1500 V DC.

Aarksol Renewables Private Limited

Office Address: Office No. 601-602, 6th Floor, Laxmi Enclave-2,
Gajera Circle, Katargam, Surat, Gujarat - 395004
Factory Address: Block No. 609, City Survey No. NA609, NH-48,
Kosamba, Velachha, Surat, Gujarat - 394405

+91 96012 09555 | info@aarksol.com

*Due to continuous product updation, specifications may change without notice



**Power You
Can Trust!**

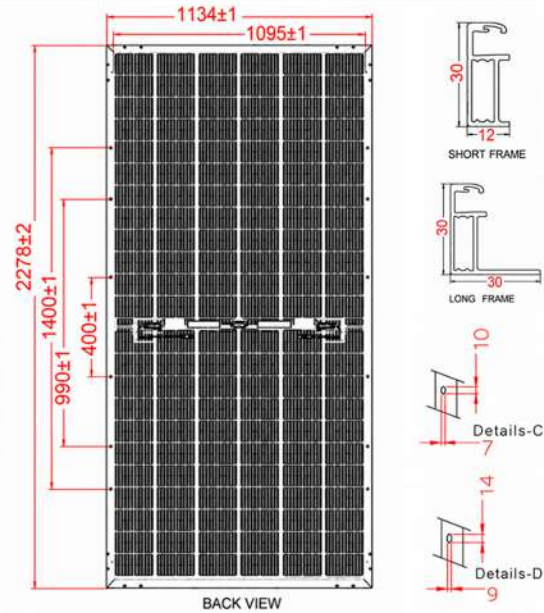
AR M10R 144N	M10R	590W	22.84%	+4.99Wp	±1.0%
N Type Topcon PV Modules	16 BB HALF CUT CELL MODULE	MAXIMUM POWER OUTPUT	MAXIMUM EFFICIENCY	POWER TOLERANCE	FIRST YEAR POWER DEGRADATION

Mechanical Data

Length x Width x Height	2278 x 1134 x 30 mm (89.68 x 44.65 x 1.18 inches)
Weight	31.6 ± 5% Kg (69.67 lbs)
Junction Box	IP 68, Split Junction Box with individual bypass diodes
Cable & Connectors#	200 mm (+ve terminal) and 300 mm (-ve terminal) length cables, MC4 Compatible / MC4 Connectors
Application Class	Class A (Safety class II)
Superstrate##	2.0 mm (0.098 inches) high transmission ARC Semi-tempered glass (low iron content)
Cells	72 (144 half-cells) N-TYPE bifacial solar cells
Substrate	2.0 mm (0.098 inches) high transmission heat strengthened glass / mesh glass** (low iron content)
Frame	Anodized aluminium / Alloy steel frame**
Mechanical Load Test	5400 Pa (Snow load), 2400 Pa (Wind load)
Cell Encapsulant	EPE / EVA
Maximum Series Fuse Rating	30A
Hail Test^	Ø 45 mm Impact Velocity up to 27 m/s

Mechanical Loading

Front Side Maximum Static Loading	5400Pa
Rear Side Maximum Static Loading	2400Pa



*STC: Irradiance 1000 W/m², module temperature 25°C, AM=1.5;
*NOCT: Irradiance 800 W/m², ambient temperature 20°C, AM-1.5, Wind speed 1m/sec. Average power reduction of 4.5% at 200 W/m². Measuring Uncertainty 0-3%

Module Type	STC	STC	STC	STC	STC
Peak Power - Pmax	570	575	580	585	590
Maximum voltage (Vmpp)	51.26	51.3	51.34	51.38	51.42
Maximum current (Imp)	13.61	13.71	13.83	13.93	14.04
Open circuit voltage (Voc)	43.99	44.03	44.07	44.11	44.15
Short circuit current (Isc)	12.96	13.06	13.17	13.27	13.37
Module Efficiency	22.05	22.24	22.44	22.63	22.83

Operating Temperature range (°C)	-40 to +85°C	Power Tolerance	Positive Power Tolerance
Maximum system voltage	DC1500V (IEC)	Nominal operating cell temperature (NOCT)	45 ± 2 °C
Maximum series fuse rating	30A	Application	Class - A
Temperature coefficients of Isc (α)	0.044%/°C	Safety Class	Class - II
Temperature coefficients of Pmax (γ)	-0.30%/°C	Application Rating	Class - A
Temperature coefficients of Voc (β)	-0.25%/°C		

Bifacial Gain	Description	PE-570	PE-575	PE-580	PE-585	PE-590
10%	Power Pmp	627	632.5	638	643.5	649
20%	Power Pmp	684	690	696	702	708
30%	Power Pmp	741	747.5	754	760.5	767

Packaging Configuration

Modules per Box	37 Pieces
Modules per 40' Container	620 Pieces

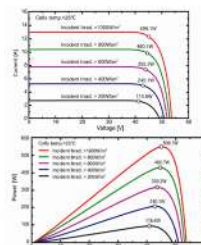
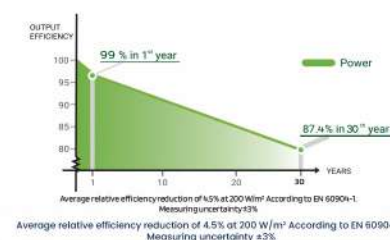
Warranty

Product Warranty	12 Years
Performance Warranty	30 Year linear power warranty 0.40% Annual degradation over 30 years.

Certifications



*Note : These certificates are under process.



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