

ALEXUS 144 Series

Monocrystalline PERC Half-cell Module 530W~550W

ALEXUS SOLAR
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Features



- ▲ Higher Output Power
- ▲ Module Efficiency up to 21.3%
- ▲ Lower Temperature Coefficient



- ▲ Lower LCOE (Levelized Cost of Energy)
- ▲ High Power Output Lead to Lower BOS Cost



- ▲ ISO9001:2015 Quality Management System
- ▲ ISO14001:2015 Environmental Management System
- ▲ ISO45001:2018 Occupational Health and Safety Management System



- ▲ Salt Mist Corrosion Protection
- ▲ Ammonia Resistance

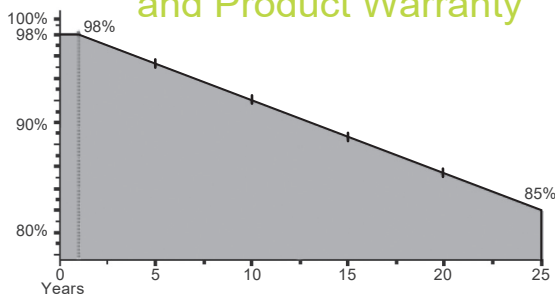


- ▲ Excellent Potential Induced Degradation Resistance



- ▲ Excellent Wind Load 2400Pa & Snow Load 5400Pa Under Certain Installation Method

25 Years Linear Performance and Product Warranty



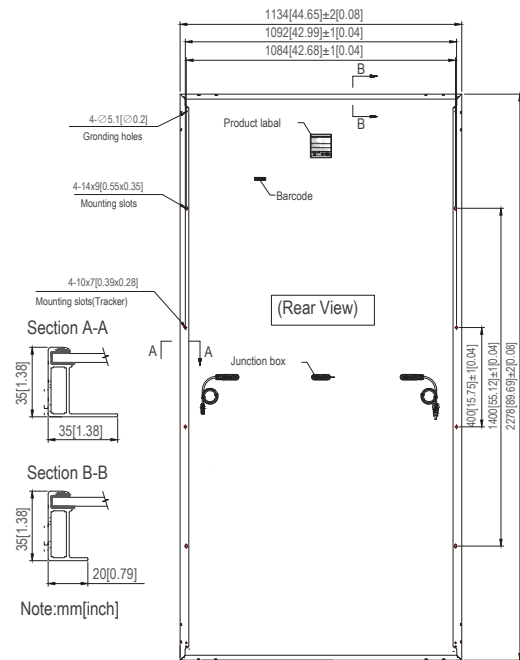
Certifications and Tests

IEC61215; IEC61730; UL61730 (No A-E533316)/ETL/CEC
 IEC62804 PID
 IEC61701 Salt Mist
 IEC62716 Ammonia Resistance
 IEC60068 Dust and Sand
 IEC61215 Hailstone
 Fire Type (UL61730): Type 1



Mechanical Characteristics

Solar Cell	Monocrystalline silicon 182 mm
No. of Cells	144 (6 × 24)
Dimensions	2278 × 1134 × 35 mm (89.7 × 44.6 × 1.4 inches)
Weight	27.5 kg (60.6 lbs)
Front Glass	3.2 mm (0.126 inches) fully tempered glass
Output Cables	4.0mm ² , 1200 mm (47.2 inches) in length or customized length
Junction Box	IP68 rated (3 bypass diodes)
Operating Module Temperature	-40 °C to +85 °C
Maximum System Voltage	1500 V DC (IEC)
Maximum Series Fuse Rating	25 A
Power Tolerance	0/+5 W



Electrical Characteristics

Module Type	ALEX-550-W-144-S		ALEX-545-W-144-S		ALEX-540-W-144-S		ALEX-535-W-144-S		ALEX-530-W-144-S	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power (Pmax/W)	550	418.7	545	415	540	411.5	535	408	530	404.3
Optimum Operating Voltage (Vmp/V)	41.99	39.1	41.83	38.9	41.67	38.7	41.51	38.6	41.31	38.4
Optimum Operating Current (Imp/A)	13.10	10.72	13.03	10.67	12.96	10.63	12.89	10.58	12.83	10.53
Open Circuit Voltage (Voc/V)	49.84	47	49.68	46.9	49.52	46.7	49.36	46.5	49.16	46.4
Short Circuit Current (Isc/A)	14.07	11.27	14.01	11.22	13.96	11.18	13.89	11.13	13.83	11.08
Module Efficiency (%)	21.5		21.3		21.1		20.9		20.7	

STC: Irradiance 1000 W/m², module temperature 25 °C, AM=1.5; NMOT: Irradiance 800 W/m², ambient temperature 20 °C, AM=1.5, wind speed 1 m/s; Tolerance of Pmax is within +/- 3%;

Temperature Characteristics

Nominal Module Operating Temperature (NMOT)	45 ± 2 °C
Temperature Coefficient of Pmax	-0.34%/°C
Temperature Coefficient of Voc	-0.26%/°C
Temperature Coefficient of Isc	0.050%/°C

Curves

