

TOPSUN

ALL BLACK

HIGH PERFORMANCE
MONOCRYSTALLINE
N- TYPE TECHNOLOGY

144

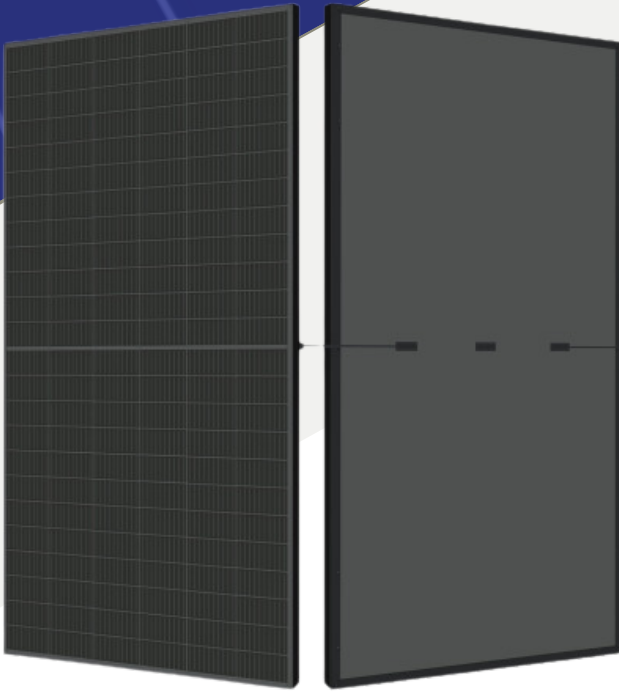
TOP - 560/580M-144AB

144 CELL
Mono N - Type Module

560 - 580Wp
Power Output Range

1500VDC
Maximum System Voltage

22.46%
Maximum Efficiency



KEY SALIENT FEATURES

- Industry leading lowest thermal co-efficient of power
- Industry leading 15 years product warranty
- Excellent low irradiance performance
- Excellent PID resistance
- Positive power tolerance of 0~+3%
- Fully automated production at all stages
- Fully Reduced power loss by minimizing the effect of shadow shading (9 - 18 Busbar)
- European Warranty & After - Sales Service



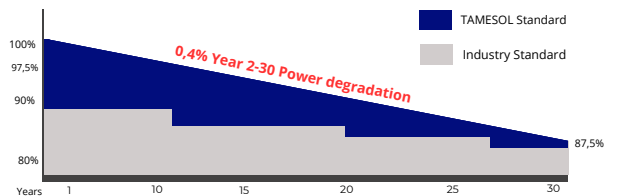
TAMESOL BUILDING A GREEN FUTURE S.L

TAMESOL is a global provider of high-efficiency PV panels with a 10GW annual production capacity and a 100% automated production line, innovating state-of-the-art products for over 15 years. Our panels have been installed in more than 50 countries, with over 20 million panels already connected to the grid.

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LINEAR PERFORMANCE WARRANTY

15 year Product Warranty / 30-Year Linear Power Warranty

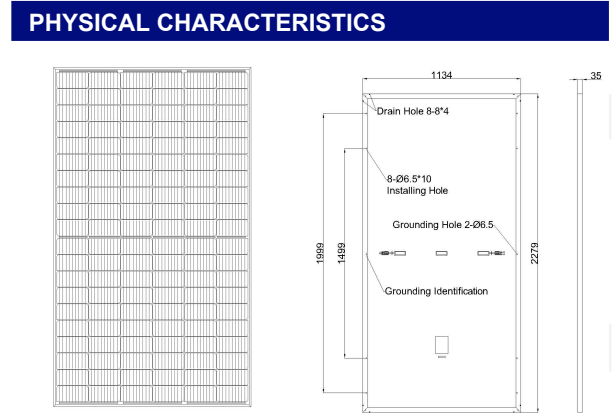


Since 2007, building a green future

22,46% MAX MODULE EFFICIENCY	0 - 3% POWER TOLERANCE	1,0% FIRST YEAR POWER DEGRADATION	0,40% YEAR 2-30 POWER DEGRADATION	N-TYPE CELL Lower operating temperature
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ELECTRICAL CHARACTERISTICS	STC: AM1.5 1.000W/m2 NOTC: AM1.5 800W/m2 20° 1 m/s Test uncertainty for Pmax +-3%									
	TOP - 560M-144AB		TOP - 565M-144AB		TOP - 570M-144AB		TOP - 575M-144AB		TOP - 580M-144AB	
Module type	STC	NOTC	STC	NOTC	STC	NOTC	STC	NOTC	STC	NOTC
Testing condition	STC	NOTC	STC	NOTC	STC	NOTC	STC	NOTC	STC	NOTC
Maximum Power (Pmax/w)	560	421	565	429	570	429	575	433	580	437
Open Circuit Voltage (Voc/V)	50,47	47,94	50,60	48,06	50,74	48,20	50,88	48,29	51,00	48,37
Short Circuit Current (Isc/A)	14,15	11,42	14,23	11,49	14,31	11,57	14,38	11,66	14,39	11,73
Voltage at Maximum Power (Vmp/V)	41,77	39,25	41,92	39,38	42,01	39,51	42,10	39,64	42,19	39,71
Current at maximum Power (Imp/A)	13,41	10,73	13,48	10,79	13,55	10,85	13,65	10,92	13,75	11,00
Module Efficiency (%)	21,66%		21,86%		22,06%		22,26%		22,46%	

MECHANICAL PARAMETERS	
Cell Orientation	single crystal N-Topcon 182x91mm (144 pieces)
Junction Box	IP68, three diodes
Output Cable	1200mm (can be customized)
Glass	3.2mm high transparency, tempered glass
Frame	Anodized aluminum alloy frame
Weight	28 kg
Dimensión	2279*1134*35mm
Packaging	31 pcs*pallet / 620pcs*40HQ



OPERATING PARAMETERS	
Operational Temperature	-40°C - +85°C
Power Output Tolerance	(0, +3%)
Voc and Isc Tolerance	±3%
Maximum System Voltage	1500V DC
Maximum Series Fuse Rating	25 A
Nominal Operating Cell Temperature	45±2°C
Protection Glass	Class II
Fire Rating	Class C

MECHANICAL LOADING	
Front Side Maximum Static Loading	5400 PA
Rear Side Maximum Static Loading	2400 PA
Hailstone Test	Diameter 25mm, impact speed 23m/s

TEMPERATURA RATINGS (STC)	
Temperature Coefficient of Isc	+0.046%/°C
Temperature Coefficient of Voc	-0.27%/°C
Temperature Coefficient of Pmax	-0.30%/°C

PACKING MANNER	
Container	40ft(HQ)
Number of modules per container	620
Number of modules per pallet	31
Number of pallets per container	20

TAMESOL Authorized Solar Dealer

Note: The specifications are obtained under the Standard Test Conditions (STCs): 1000 W/m2 solar irradiance, 1.5 Air Mass, and cell temperature of 25°C. The NOCT is obtained under the Test Conditions: 800 W/m2, 20°C ambient temperature, 1m/s wind speed, AM 1.5 spectrum. Please contact info@tamesol.com for technical support. The actual transactions will be subject to the contracts. This parameter is for reference only and it is not a part of the contracts. The specifications are subject to change without prior notice.