

# TOPSUN

HIGH PERFORMANCE  
MONOCRYSTALLINE  
N-TYPE TECHNOLOGY



## 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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**TAMESOL**  
Energia para vivir

144

## TOP - 565/585M-144HC









**144 CELL**  
Mono N - Type Module

**565 - 585Wp**  
Power Output Range

**Single Glass**  
White Backsheet

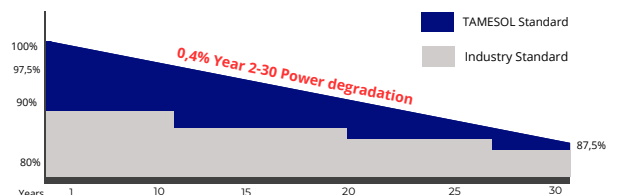
**22.65%**  
Maximum Efficiency

### 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)
-  EU Brand & european after sales service

### LINEAR PERFORMANCE WARRANTY

15 year Product Warranty / 30-Year Linear Power Warranty



*Since 2007,  
building a green future*

**22,65%**

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

## ELECTRICAL CHARACTERISTICS

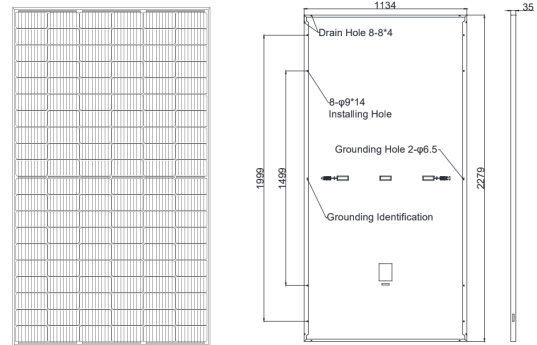
STC: AM1.5 1.000W/m<sup>2</sup> NOTC: AM1.5 800W/m<sup>2</sup> 20° 1 m/s Test uncertainty for Pmax 0 - +3%

Module type	TOP - 565M-144HC		TOP - 570M-144HC		TOP - 575M-144HC		TOP - 580M-144HC		TOP - 585M-144HC	
	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)	565	425	570	429	575	433	580	437	585	441
Open Circuit Voltage (Voc/V)	50,60	48,07	50,74	48,20	50,88	48,33	51,02	48,46	51,16	48,59
Short Circuit Current (Isc/A)	14,23	11,46	14,31	11,55	14,39	11,62	14,47	11,68	14,55	11,77
Voltage at Maximum Power (Vmp/V)	41,92	39,38	42,07	39,51	42,22	39,64	42,37	39,77	42,52	39,90
Current at maximum Power (Imp/A)	13,48	10,79	13,55	10,85	13,62	10,91	13,69	10,97	13,76	11,06
Module Efficiency (%)	21,86%		22,06%		22,26%		22,45%		22,65%	

## MECHANICAL PARAMETERS

Cell Orientation	single crystal N-Topcon 182x91mm (144 pieces)
Junction Box	IP68, three diodes
Output Cable	300mm(+) customized
Glass	3.2mm tempered coated glass, low iron
Frame	Anodized aluminum alloy frame
Weight	25 , 27,5 kg
Dimensión	2278*1134*30/35mm
Packaging	31/37 pcs*pallet / 620/740 pcs*40HC

## PHYSICAL CHARACTERISTICS



## OPERATING PARAMETERS

Operational Temperature	-40°C - +85°C
Power Output Tolerance	(0, +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

## TEMPERATURA RATINGS (STC)

Temperature Coefficient of Isc	+0.046%/°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of Pmax	-0.30%/°C

## PACKING MANNER

Container	40ft(HQ)
Number of modules per container	620/740
Number of modules per pallet	31/37
Number of pallets per container	20

TAMESOL Authorized Solar Dealer

**Note:** The specifications are obtained under the Standard Test Conditions (STCs): 1000 W/m<sup>2</sup> solar irradiance, 1.5 Air Mass, and cell temperature of 25°C. The NOCT is obtained under the Test Conditions: 800 W/m<sup>2</sup>, 20°C ambient temperature, 1m/s wind speed, AM 1.5 spectrum.

Please contact [info@tamesol.com](mailto: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.