# TOPSUN

**HIGH PERFOMANCE** MONOCRYSTALLINE **N- TYPE TECHNOLOGY** 



# TOP - 600/620M-132HC

**132 CELL** Mono N - Type Module 600 - 620Wp Power Output Range

1500VDC Maximum System Voltage 22.95% 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



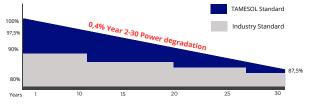
Fully Reduced power loss by minimizing the effect of shadow shading (9 - 18 Busbar)



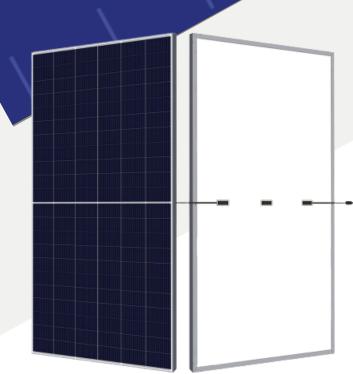
European Warranty & After - Sales Service

#### LINEAR PERFORMANCE WARRANTY

15 year Product Warranty / 30-Year Linear Power Warranty



Since 2007, building a green future





#### **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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# TOP-600/620M-132HC

# 22,95% MAX MODULE EFFICIENCY

# 0-3%

**1,0%** FIRST YEAR POWER

**0,40%** YEAR 2-30 POWER DEGRADATION

## **N-TYPE CELL**

Lower operating temperature

ELECTRICAL CHARACTERISTICS STC: AM1.5 1.000W/m2 NOTC: AM1.5 800W/m2 20° 1 m/s Test uncertainty for Pmax +-3%								ax +-3%		
Module type	TOP - 600M-132HC		TOP - 605M-132GC		TOP - 610M-132HC		TOP - 615M-132HC		TOP - 620M-132HC	
Testing condition	STC	NOTC	STC	NOTC	STC	NOTC	STC	NOTC	STC	NOTC
Maximum Power (Pmax/w)	600	451	605	455	610	459	615	462	620	466
Open Circuit Voltage (Voc/V)	48.28	45.86	48.48	46.06	48.68	46.25	48.88	46.44	49.08	46.63
Short Circuit Current (Isc/A)	15.84	12.53	15.90	12,58	15.96	12.64	16.02	12.67	16.08	12.72
Voltage at Maximum Power (Vmp/V)	40.16	38.15	40.31	38.29	40.46	38.44	40.60	38.57	40.74	38.70
Current at maximum Power (Imp/A)	14.94	11.82	15.01	11.88	15.08	11.94	15.15	11.98	15.22	12.04
Module Efficiency (%)	22.21%		22,40%		22,58%		22,27%		22,95%	

#### **MECHANICAL PARAMETERS**

**OPERATING PARAMETERS** 

Nominal Operating Cell Temperature

**Operational Temperature** 

Power Output Tolerance

Maximum System Voltage Maximum Series Fuse Rating

Voc and Isc Tolerance

Protection Glass

Fire Rating

**Cell Orientation** 

single crystal N-Topcon 182x105mm (132 pieces)

-40°C - +85°C

(0, +3%)

±3%

1500V DC

30 A

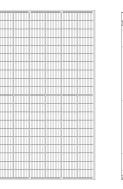
45±2°C

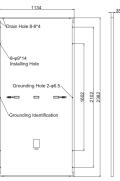
Class II

Class C

Junction Box	IP68, three diodes
Output Cable	4.0mm <sup>2</sup> 300mm(+) / 300mm(-) or customized
Glass	3.2mm tempered coated glass, low iron
Frame	Anodized aluminum alloy frame
Weight	31 kg
Dimensión	2382*1134*35mm
Packaging	31 pcs*pallet / 620 pcs*40HQ

#### PHYSICAL CHARACTERISTICS





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

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
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.