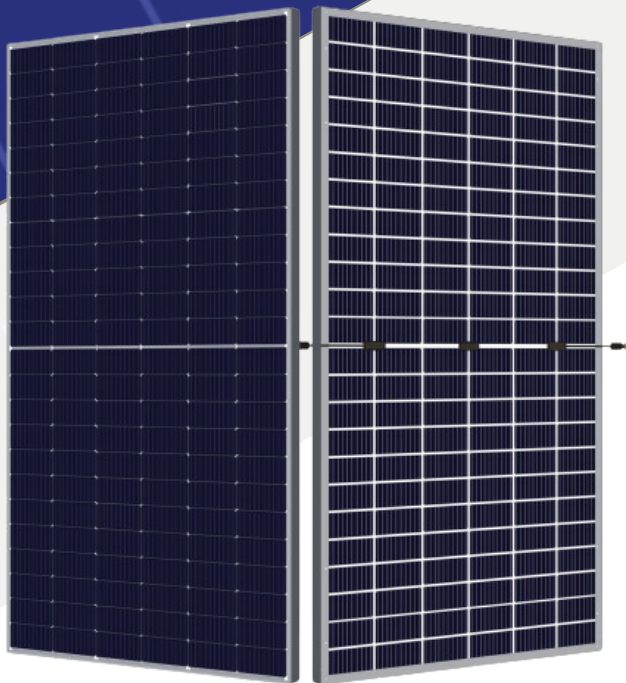


HIGH PERFORMANCE
MONOCRYSTALLINE
N- TYPE TECHNOLOGY
DOUBLE GLASS



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.

Tel : +34 872 222 388

E - mail: info@tamesol.com Website: www.tamesol.com

TAMESOL
— be bright, go solar —

TOP - 600/620M-132BI

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 25 years product warranty



Excellent low irradiance performance



Excellent PID resistance



Positive power tolerance of 0~+3%



Fully automated production at all stages



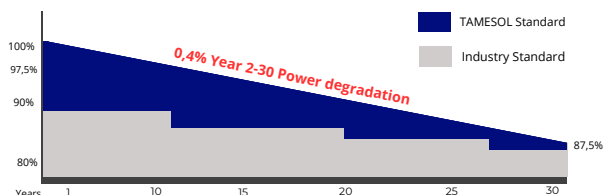
Fully Reduced power loss by minimizing the effect of shadow shading (9 - 18 Busbar)



European Warranty & After - Sales Service

LINEAR PERFORMANCE WARRANTY

25 year Product Warranty / 30-Year Linear Power Warranty



Since 2007, building a green future

22,95%

 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/m2

NOTC: AM1.5 800W/m2 20° 1 m/s Test uncertainty for Pmax +3%

Module type	TOP - 600M-132BI		TOP - 605M-132BI		TOP - 610M-132BI		TOP - 615M-132BI		TOP - 620M-132BI	
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%	16.70%	22,40%	16.84%	22,58%	16.99%	22,27%	17.10%	22,95%	17.25%

MECHANICAL PARAMETERS

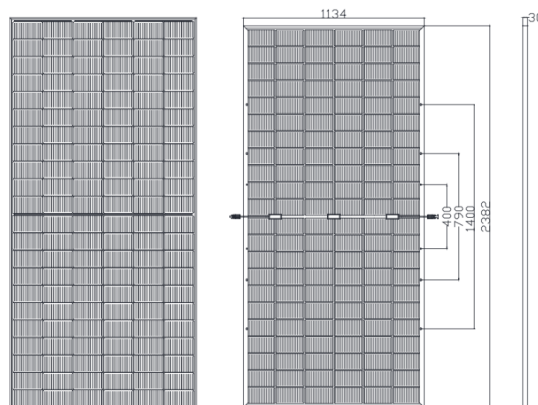
Cell Orientation	single crystal N-Topcon 182x105mm (132 pieces)
Junction Box	IP68, three diodes
Output Cable	4.0mm² 300mm(+) / 300mm(-) or customized
Glass	2.0mm / 2.0mm
Frame	Anodized aluminum alloy frame
Weight	33.7 kg
Dimensión	2382*1134*30mm
Packaging	31 pcs*pallet / 720pcs*40HC

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	35 A
Nominal Operating Cell Temperature	45±2°C
Protection Glass	Class II
Fire Rating	Class C
Bifacial - Factor	80% ± 5%

PACKING MANNER

Container	40ft(HQ)
Number of modules per container	720
Number of modules per pallet	36
Number of pallets per container	20

PHYSICAL CHARACTERISTICS

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	+0.045%/°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of Pmax	-0.30%/°C

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.