

TOPSUN

BIFACIAL

HIGH PERFORMANCE
MONOCRYSTALLINE
N- TYPE TECHNOLOGY

156

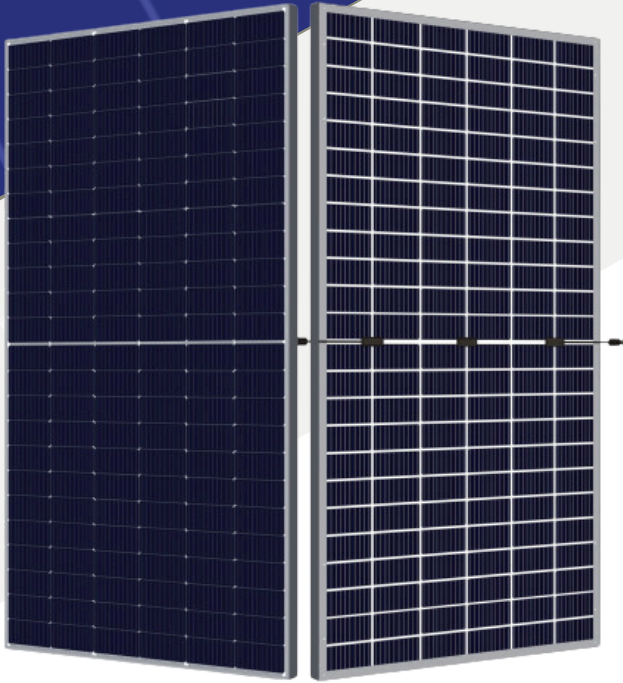
TOP - 615/635M-156BI

156 CELL
Mono N - Type Module









615 - 635Wp
Power Output Range

1500VDC
Maximum System Voltage

22.72%
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



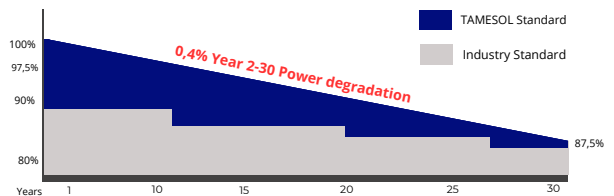
TAMESOL BUILDING A GREEN FUTURE S.L

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

22,72% 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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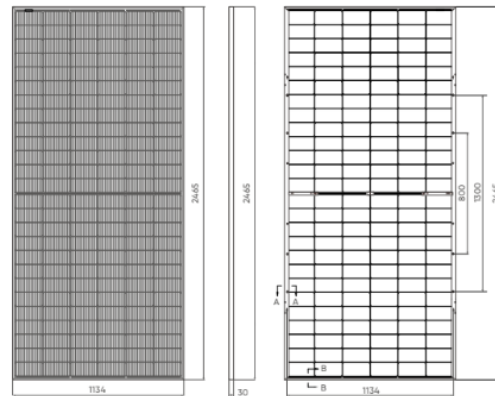
ELECTRICAL CHARACTERISTICS STC: AM1.5 1.000W/m² NOTC: AM1.5 800W/m² 20° 1 m/s Test uncertainty for Pmax 0 - +3%

Module type	TOP - 615M-156BI		TOP - 620M-156BI		TOP - 625M-156BI		TOP - 630M-156BI		TOP - 635M-156BI	
	STC	NOTC	STC	NOTC	STC	NOTC	STC	NOTC	STC	NOTC
Testing condition										
Maximum Power (Pmax/w)	615	463	620	467	625	471	630	475	635	479
Open Circuit Voltage (Voc/V)	56.29	53.85	56.82	53.97	56.95	54.10	57.08	54.22	57.21	54.34
Short Circuit Current (Isc/A)	13.68	11.04	13.74	11.09	13.80	11.14	13.86	11.19	13.92	11.24
Voltage at Maximum Power (Vmp/V)	47.20	44.39	47.37	44.54	47.54	44.69	47.70	44.83	47.86	44.98
Current at maximum Power (Imp/A)	13.03	10.44	13.09	10.59	13.15	10.54	13.21	10.59	13.27	10.64
Module Efficiency (%)	22.00%		22,18%		22,36%		22,54%		22,72%	

MECHANICAL PARAMETERS

Cell Orientation	single crystal N-Topcon 182x99,5mm (156 pieces)
Junction Box	IP68, three diodes
Output Cable	4.0mm ² 300mm(+) / 300mm(-) or customized
Glass	2.0mm tempered coated glass, low iron
Frame	Anodized aluminum alloy frame
Weight	34,5kg
Dimensión	2465*1134*30mm
Packaging	36 pcs*pallet / 576pcs*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
Bifacial - Factor	80% ± 10%

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	576
Number of modules per pallet	36
Number of pallets per container	16

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.