

TOP - 620/640M-156HC









156 CELL
Mono N - Type Module

620 - 640Wp
Power Output Range

1500VDC
Maximum System Voltage

22.90%
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

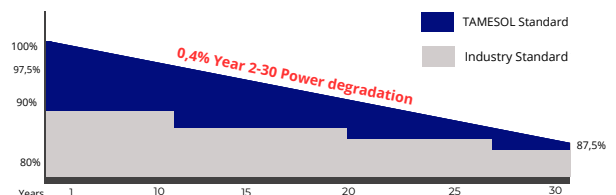
TAMESOL is a global provider of high-efficiency PV panels with a 10GW annual production capacity and a 100% automated production line, innovating state-of-the-art products for over 15 years. Our panels have been installed in more than 50 countries, with over 20 million panels already connected to the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

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LINEAR PERFORMANCE WARRANTY

15 year Product Warranty / 30-Year Linear Power Warranty



22,90%

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

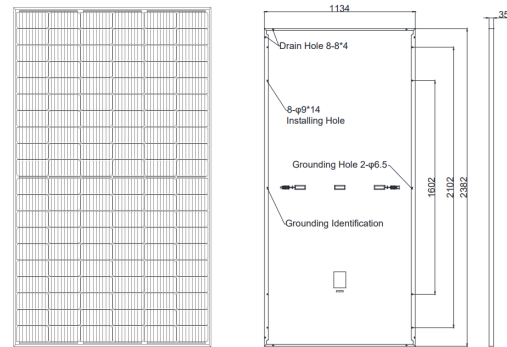
STC: AM1.5 1.000W/m2 NOTC: AM1.5 800W/m2 20° 1 m/s Test uncertainty for Pmax 0 - +3%

| Module type | TOP - 620M-156HC | | TOP - 625M-156HC | | TOP - 630M-156HC | | TOP - 635M-156HC | | TOP - 640M-156HC | |
|----------------------------------|------------------|-------|------------------|-------|------------------|-------|------------------|-------|------------------|-------|
| | STC | NOTC | STC | NOTC | STC | NOTC | STC | NOTC | STC | NOTC |
| Testing condition | | | | | | | | | | |
| Maximum Power (Pmax/w) | 620 | 469 | 625 | 473 | 630 | 477 | 635 | 481 | 640 | 484 |
| Open Circuit Voltage (Voc/V) | 56.85 | 54.07 | 57.05 | 54.26 | 57.25 | 54.54 | 57.45 | 54.64 | 57.83 | 54.83 |
| Short Circuit Current (Isc/A) | 13.50 | 10.63 | 13.55 | 10.67 | 13.60 | 10.71 | 13.65 | 10.74 | 13.83 | 10.78 |
| Voltage at Maximum Power (Vmp/V) | 48.42 | 46.61 | 48.62 | 46.61 | 48.82 | 46.99 | 49.02 | 47.18 | 49.38 | 47.38 |
| Current at maximum Power (Imp/A) | 12.81 | 10.07 | 12.86 | 10.07 | 12.86 | 10.15 | 12.96 | 10.18 | 13.10 | 10.22 |
| Module Efficiency (%) | 22,18% | | 22,36% | | 22,54% | | 22,72% | | 22,90% | |

MECHANICAL PARAMETERS

| | |
|------------------|--|
| Cell Orientation | single crystal N-Topcon 182x105mm (156 pieces) |
| Junction Box | IP68, three diodes |
| Output Cable | 4.0mm ² 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 / 496 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 | 496 |
| Number of modules per pallet | 31 |
| 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.