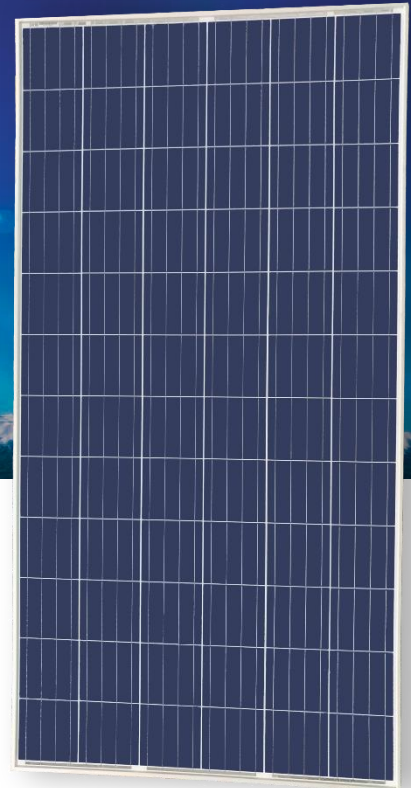




TBM72-320P

Poly Crystalline 72 Cell Module – 320 W



TABAN Energy is one of the most reliable PV module manufacturer whose products are Ideal for all PV power plants. TABAN modules are complying to withstand the most challenging environmental conditions. Maximum efficiency of 16.5% caused by well-engineered module design, stringent BOM quality testing, and German automated manufacturing process.



High Resistance PID

Advanced cell technology and qualified materials lead to high resistance PID



High Reliability

Highly reliable due to stringent quality control and 2x100% EL inspection



High System Voltage Compatible

Maximum 1500 V DC system voltage reduces total system cost



IP68 Rated Junction Box

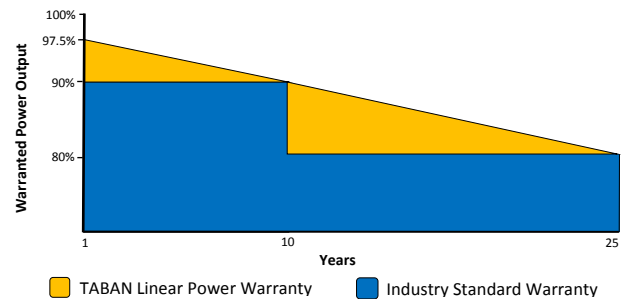
IP68 junction box for long-term weather endurance



Linear Power Output Warranty



Product Warranty on materials and workmanship



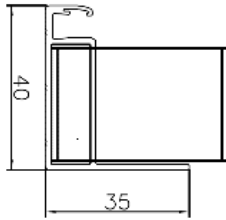
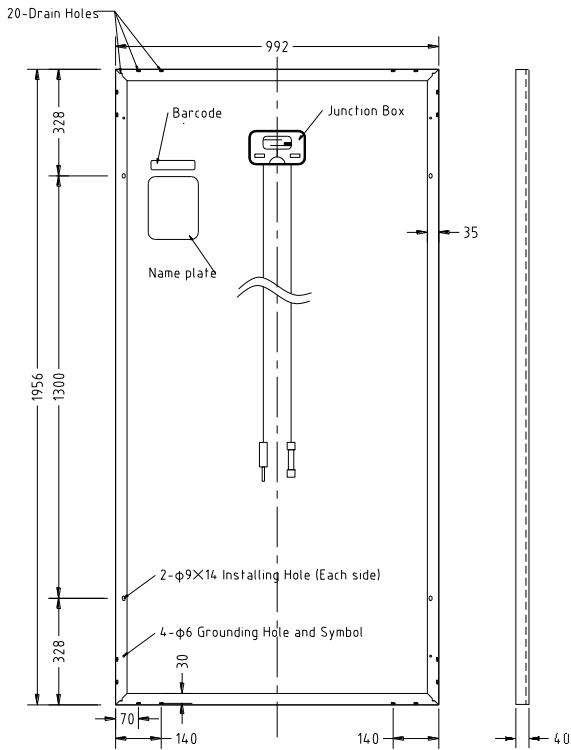
Product under Process Tests in TÜV Rheinland Laboratory – Cologne Germany

- IEC 61215:2016 design qualification & type approval
- IEC 61730:2016; PV module safety qualification
- IEC 61701:2011; Salt Mist Corrosion Resistant

Product Passed Tests in TÜV Rheinland Cologne Laboratory

- IEC 62804, 2PFG 2387 PID Resistant
- IEC 60068-2-68 LC 2; sand abrasion test

DIMENSIONS OF PV MODULES (mm)

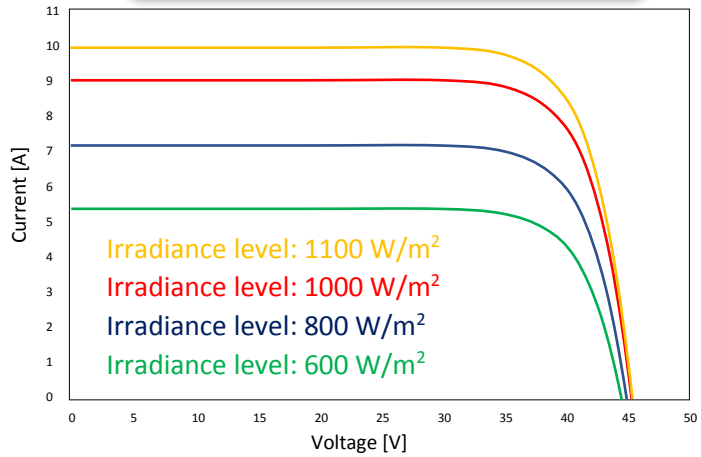


Warning: Read the Installation and User Manual in its entirety before handling, installing, and operating TABAN Solar modules.

Partner Section:



I-V CURVES OF PV MODULES (320 W)



SPECIFICATIONS

Solar Cells	Polycrystalline 156.75 × 156.75 mm (6.17 inches)
Cell Orientation	72 cells (6 × 12)
Module Dimensions	1956 × 992 × 40 mm (77.0 × 39.1 × 1.57 inches)
Weight	22 kg (48.5 lb.)
Glass	3.2 mm (0.13 inches), High Transmission, AR Coated Tempered Glass
Backsheet	White
Frame	Silver Anodized Aluminum Alloy
Junction Box	IP68, 3 Bypass Diodes
Cables	Photovoltaic Technology Cable 4.0 mm ² , 1100 mm (43.3 inches)
Connector	MC4
Per Pallet	26 pieces, 635 kg (1400 lbs)
Per container (40' HQ)	624 pieces

ELECTRICAL PARAMETERS AT STC

Module type	TBM72-320P
Maximum Power (P_{max})[*] [W]	320
Maximum Power Voltage (V_{mp}) [V]	36.9
Maximum Power Current (I_{mp}) [A]	8.68
Open-circuit Voltage (V_{oc})^{**} [V]	45.8
Short-circuit Current (I_{sc})[†] [A]	9.13
Module Efficiency STC [%]	16.5
Operating Temperature (η) [°C]	-40~+85
Maximum System Voltage [VDC]	1500
Maximum Overcurrent Protection Rating [A]	15
PV Module Classification	Class II

STC: Standard Test Condition; Irradiance 1000 W/m², Cell Temperature (25±2) °C, AM1.5 acc. to IEC 60904-3
^{*} Maximum measurement uncertainty: ±5% ^{**} Maximum measurement uncertainty: ±0.5%

ELECTRICAL PARAMETERS AT NMOT

Module type	TBM72-320P
Maximum Power (P_{max}) [W]	243
Maximum Power Voltage (V_{mp}) [V]	34.5
Maximum Power Current (I_{mp}) [A]	7.04
Open-circuit Voltage (V_{oc}) [V]	40.5
Short-circuit Current (I_{sc}) [A]	7.92

Under Nominal Module Operating Temperature, Irradiance 800 W/m², Ambient Temperature 20 °C, AM 1.5, Wind Speed 1 m/s

TEMPERATURE CHARACTERISTICS

Temperature Coefficient of P_{max} [%/°C]	-0.4038
Temperature Coefficient of V_{oc} [%/°C]	-0.2994
Temperature Coefficient of I_{sc} [%/°C]	0.0461
Nominal Module Operating Temperature [°C]	40.2 ± 2