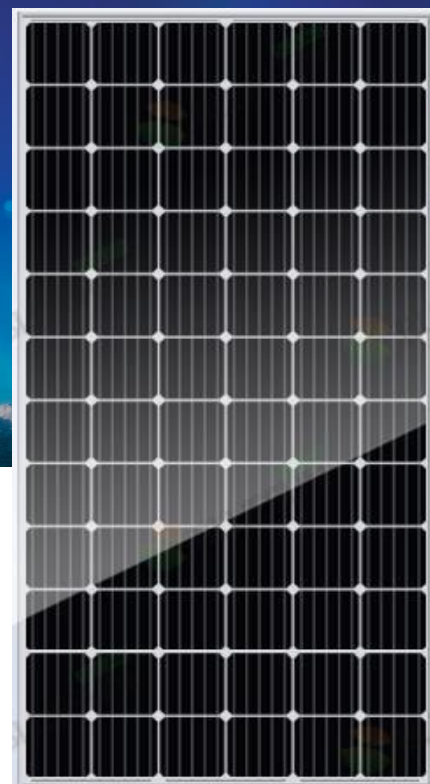




TBM72-380M~390M

PERC Mono Crystalline 72 Cell Module – 380~390 W

TABAN Energy is the largest PV module manufacturer in Iran whose products have been optimized, to withstand the most challenging environmental conditions. Maximum efficiency of 19.53~20% is the result of well engineered module design, stringent material screening and processing along with and German automated processing.



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\1000 V DC system voltage reduces total system cost



IP68\67\65 Rated Junction Box

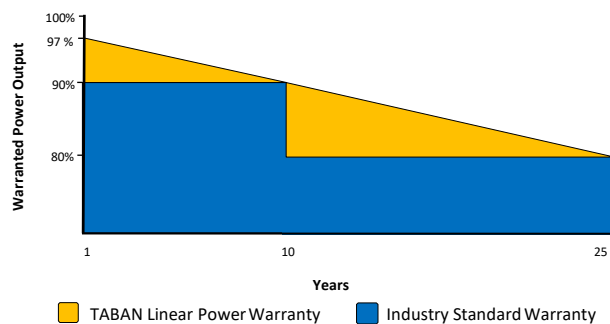
IP68 junction box for long-term weather endurance



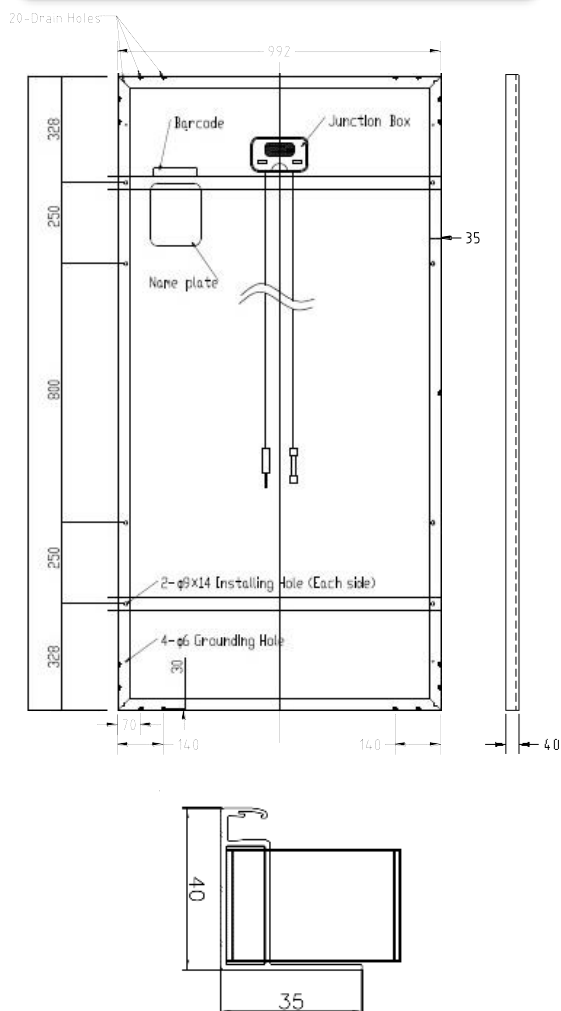
Linear Power Output Warranty



Product Warranty on materials and workmanship



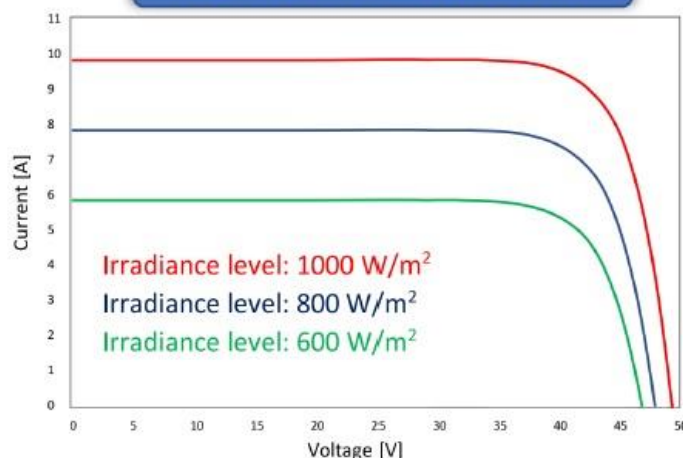
DIMENSIONS OF PV MODULES (mm)



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 (385 W)



SPECIFICATIONS

Solar Cells	PERC monocrystalline 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\Black
Frame	Silver Anodized Aluminum Alloy
Junction Box	IP68\67\65, 3 Bypass Diodes
Cables	Photovoltaic Technology Cable 4.0 mm ² , 1100 mm (43.3 inches)\1000mm
Connector	MC4
Per Pallet	27 pieces, 657 kg (1448 lbs)
Per container (40' HQ)	648 pieces

ELECTRICAL PARAMETERS AT STC

Module type	TBM72-380M	TBM72-385M	TBM72-390M
Maximum Power (P_{max}) [W]	380	385	390
Maximum Power Voltage (V_{mp}) [V]	40.90	41.23	41.56
Maximum Power Current (I_{mp}) [A]	9.27	9.32	9.39
Open-circuit Voltage (V_{oc})** [V]	48.82	48.95	49.10
Short-circuit Current (I_{sc})* [A]	9.85	9.98	10.05
Module Efficiency STC [%]	19.53	19.80	20
Operating Temperature (η) [°C]	-40~+85		
Maximum System Voltage [VDC]	1000\1500		
Maximum Series Fuse Rating [A]	15		

STC: Standard Test Condition; Irradiance 1000 W/m², Cell Temperature (25±2) °C, AM1.5 acc. to IEC 60904-3

* Maximum measurement uncertainty: ±5 %

ELECTRICAL PARAMETERS AT NMOT

Module type	TBM72-380M	TBM72-385M	TBM72-390M
Maximum Power (P_{max}) [W]	281	285	288
Maximum Power Voltage (V_{mp}) [V]	37.8	38.2	38.32
Maximum Power Current (I_{mp}) [A]	7.43	7.46	7.51
Open-circuit Voltage (V_{oc}) [V]	45.79	46.29	46.35
Short-circuit Current (I_{sc}) [A]	8.01	8.10	8.02

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

TEMPERATURE COEFFICIENT

Temperature Coefficient of P_{max} [%/°C]	-0.38
Temperature Coefficient of V_{oc} [%/°C]	-0.36
Temperature Coefficient of I_{sc} [%/°C]	0.07
Nominal Module Operating Temperature [°C]	40.2 ± 2