



Framed Solar Module ECO-Series

Model: ES-62T

- High Temperature and Low Light Performance
- 20 Year Warranty on Power Output at 80%
- Quick-Connect Terminals*
- Bypass Diodes for Shadow Tolerance
- UL Listed to 600 VDC 
- Safety Class II up to 1000 VDC 
- Meets IEC 61646 Requirements



PERFORMANCE CHARACTERISTICS

Rated Power (Pmax): 62W
Production Tolerance: ± 5%

CONSTRUCTION CHARACTERISTICS

Dimensions: Length: 1257mm (49.5”), Width: 793mm (31.2”), Depth: 32mm (1.25”).

Weight: 10.9 kg (24.0 lbs.).

Output Cables: ~2.5mm² cable with weatherproof DC rated quick-connect terminals* 560mm (22”) length.

By-pass Diodes: Connected across every solar cell.

Module Encapsulation: Durable ETFE (e.g. Tefzel[®]) high light-transmissive polymer.

Back Sheet: Aluminum-zinc alloy coated steel (e.g. Galvalume[®]) 0.61mm (0.024”) 24-gauge.

Frame: Black anodized aluminum 6063 T6 or 6060 T6.

Cell Type: 10 triple junction amorphous silicon solar cells 356 x 239mm (14” x 9.4”) connected in series.

QUALIFICATIONS AND SAFETY



Framed modules certified by TÜV Rheinland as Safety Class II equipment for use in systems up to 1000 VDC.



Listed by Underwriter’s Laboratories for electrical and fire safety (Class A Max. Slope 2/12, Class B Max. Slope 3/12, and Class C Unlimited Slope fire ratings) for use in systems up to 600 VDC.

MODULE STANDARD CONFIGURATION

Framed module with potted terminal housing assembly with output cables and quick-connect terminals.*



MORE
KW-HRS



NO-GLASS



DURABLE



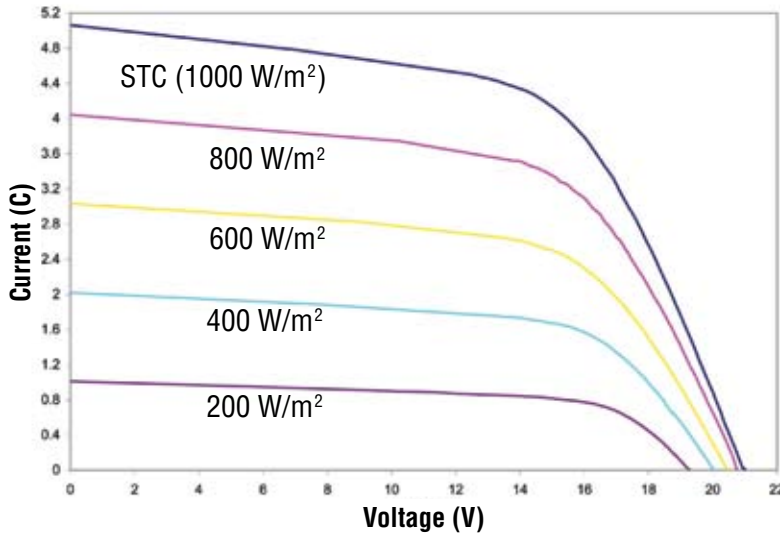
SHADOW
TOLERANT



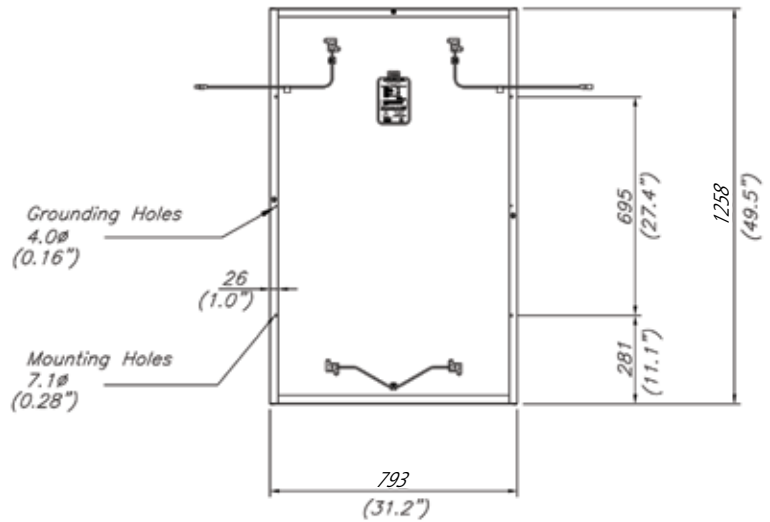
HIGH-TEMP
PERFORMANCE

* e.g., Multi-Contact (MC[®]) connectors.

IV Curves at various levels of irradiance at Air Mass 1.5 and 25° C Cell Temperature



ES-62-T



All measurements in mm.
Inches in parentheses.
Tolerances Length: ± 5mm (1/4")
Width: ± 3mm (1/8")

ELECTRICAL SPECIFICATIONS: STC

(1000 W/m², AM 1.5, 25° C Cell Temperature)

Maximum Power (Pmax): 62 W

Voltage at Pmax (Vmp): 15.0 V

Current at Pmax (Imp): 4.1 A

Short-circuit Current (Isc): 5.1 A

Open-circuit Voltage (Voc): 21.0 V

Maximum Series Fuse Rating: 8 A

NOCT

(800 W/m², AM 1.5, 1 m/sec. wind)

Maximum Power (Pmax): 48 W

Voltage at Pmax (Vmp): 14.0 V

Current at Pmax (Imp): 3.4 A

Short-circuit Current (Isc): 4.1 A

Open-circuit Voltage (Voc): 19.2 V

NOCT: 46° C

TEMPERATURE COEFFICIENTS

(at AM 1.5, 1000 W/m² irradiance)

Temperature Coefficient of Isc: 5.1mA/K (0.10%/°C)

Temperature Coefficient of Voc: -80mV/K (-0.38%/°C)

Temperature Coefficient of Pmax: -130mW/K (-0.21%/°C)

Temperature Coefficient of Imp: 4.1mA/K (0.10%/°C)

Temperature Coefficient of Vmp: -47mV/K (-0.31%/°C)

NOTES:

- During the first 8-10 weeks of operation, electrical output exceeds specified ratings. Power output may be higher by 15%, operating voltage may be higher by 11% and operating current may be higher by 4%.
- Electrical specifications are based on measurements performed at standard test conditions of 1000 W/m2 irradiance, Air Mass 1.5, and Cell Temperature of 25°C after stabilization.
- Actual performance may vary up to 10% from rated power due to low temperature operation, spectral and other related effects. Maximum system open-circuit voltage not to exceed 600 VDC per UL & 1000 VDC per TÜV.
- Specifications subject to change without notice.

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