

FRAMED SOLAR MODULES ECO-SERIES

- Power Ratings 62W & 124W
- Black Anodized Aluminum Frame
- Assemble To Meet Virtually Any Load
- Virtually Unbreakable (No Glass)
- Shadow & High Heat Tolerant
- Delivers Up To 20% More Real Energy



Photo Courtesy of Copal-Belle-Boutique



Photo Courtesy of Rodney Hearnes



UNI-SOLAR framed modules are used with permanent module racks that can be adjusted for optimum tilt, wind resistance and exposure to sunlight. These glass-free, lightweight, vandal resistant modules can be utilized in a wide variety of applications from battery charging applications to grid connected systems.

The framed modules are often used as building blocks in photovoltaic arrays, which can be assembled to meet virtually any load from less than 100 watts to multi-megawatts.

Why Do UNI-SOLAR Products Outperform Others?

All solar panels are rated in terms of peak power output (watts). Outdoors, under normally higher operating temperatures, solar panel performance changes, depending on temperature, solar spectrum (light color) and related effects. UNI-SOLAR products are less affected by temperature than monocrystalline or polycrystalline solar technology products. The result is up to 20% more delivered energy.**

** Source Solfest, "Module Shoot Out"

Applications

- Large Grid-Connected Systems
- Off-Grid Solar Home Systems
- Water Pumping Or Desalination Systems
- Telecommunications
- Gate Opening Or Fence Charging
- Bus Or Animal Shelters



MORE AMP-HRS.



NO-GLASS



DURABLE



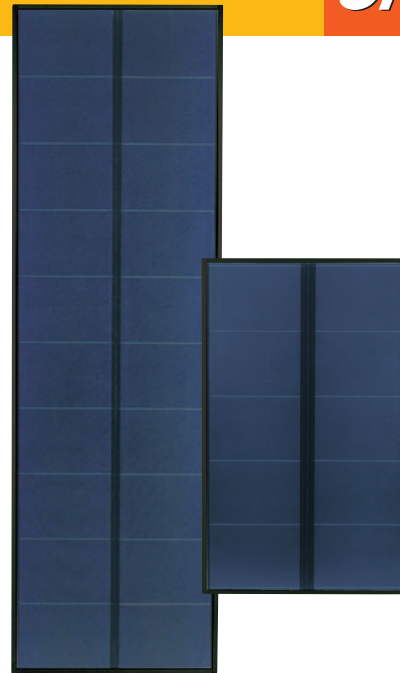
SHADOW TOLERANT



HIGH TEMP PERFORMANCE

Specifications



Model	ES-62T	ES-124
Rated Power (Wp)	62	124
Max Power Point VMPP (V)	15	30
Max Power Point IMPP (A)	4.1	4.1
Open Circuit Voltage VOC (V)	21	42
Short Circuit Current ISC (A)	5.1	5.1
Weight (lbs./kg)	10.9/24.0	45/20.5
Length (in./mm)	49.5/1258	96.8/2459
Width (in./mm)	31.25/793	31.2/793
Depth (in./mm)	1.5/39	1.3/32
Cable Length (in./mm)	22/560	22/560
Warranty On Power Output	20 yr.	20 yr.



During the first 8-10 weeks of operation, electrical output exceeds specific 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 (±5%) 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 long-term stabilization. Maximum system open circuit voltage not to exceed 600 VDC per UL and 1000 VDC per TÜV. Actual performance may vary up to 10% from rated power due to low temperature operation, spectral and other related effects. Specifications subject to change without notice.

Quality Assurance, Proven Reliability

UNI-SOLAR modules comply with the following qualification tests:

- UL Listed Up To 600 VDC 
- Safety Class II Up To 1000 VDC 
- Meets IEC 61646 Requirements
- Thermal Cycling
- Humidity-Freeze Test
- Damp Heat Test
- UV-Test
- Wet Insulation Test
- Mechanical Load Test
- Hail Impact Test
- Robustness of Terminations Test

Product Description

The UNI-SOLAR modules are exceptionally durable. They are encapsulated in UV-stabilized polymers and framed with anodized aluminium. The polymer encapsulation includes EVA and ETFE. A Galvalume® steel backing plate provides stiffness.

Bypass diodes are connected across each cell, allowing the modules to produce power even when partially shaded.

The ES-62 & ES-124 modules come standard with a Multi-Contact® connectors. The cable is a 2-conductor 12 AWG (22 in./ 560 mm) with insulation rated at 194°F/90°C.

The UNI-SOLAR ES-62 & ES-124 modules are appropriate for all applications from simple single module requirements to larger grid-connected applications.

Your UNI-SOLAR Distributor:



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