

## FLEXIBLE SOLAR MODULES FLX-SERIES

- Power Ratings From 5W - 32W
- Lightweight & Flexible
- Easy Plug & Play Connections
- Virtually Unbreakable (No Glass)
- Shadow & High Heat Tolerant
- Delivers Up To 20% More Real Energy



### Applications

- Marine Battery Charging
- RV Battery Charging
- Lighting
- Radios & Stereos
- Fish Finders - Refrigerators
- Water Pumping

### MODEL FLX-5

The FLX-5 is sized to maintain 12 volt batteries. Provides up to 13 amp-hours (ideal conditions\*) per week of 12 volt battery recharging and automatically compensates for battery self discharge.

### MODEL FLX-11

The FLX-11 produces up to 26 amp-hours (ideal conditions) per week of recharging to meet your week-end long loads. It extends battery life for bilge pump operation and average trolling motor applications. Sized to match many hatchway covers and weighs only two pounds. Reduces risk of being caught with a dead battery.

### MODEL FLX-32

The FLX-32 is a heavy duty power source that can provide more than 80 amp-hours (ideal conditions) per week of battery charging to meet demands for lighting, radios, stereos, fish finders and even water pump operation. Use multiple FLX-32's to operate refrigeration and water purification units. The FLX-32 is the reliable power source of choice for today's independent vacationers.

### 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"

## Specifications

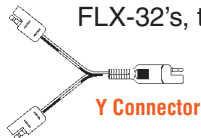
Model	FLX-32	FLX-11	FLX-5
Rated Power (Wp)	32	10	5
Max Power Point VMPP (V)	16.5	16.5	16.5
Max Power Point IMPP (A)	1.9	0.6	0.3
Short Circuit Current ISC (V)	2.4	0.8	0.4
Blocking Diode Included	Yes	Yes	Yes
Length (in./mm)	55.8/1417	21.3/541	21.3/541
Width (in./mm)	16.7/424	16.7/424	9.7/247
Weight (lbs./kg)	4.7/2.1	2/0.9	1.2/0.5
Cable Length (in./mm)	96/2438	96/2438	96/2438
Warranty On Power Output	5 yr.	5 yr.	5 yr.

During the first 8-10 weeks of operation, electrical output exceeds specific ratings. Power output may be higher by 15%, opening voltage may be higher by 11% and operating current may be higher by 4%. Electrical specifications (±10%) are based on measurements performed at standard test conditions of 1000 W/m<sup>2</sup> irradiance, Air Mass 1.5 and Cell Temperature of 25°C after long-term stabilization. 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.

\*Ideal conditions: actual amp-hours can vary depending on season, amount of available sun hours and module orientation.

## Accessories

- AP-1** Auto-plug for flexible panels (length 12 in./305 mm; one end: cigarette lighter adapter, other end: 2-pin SAE connector)
- EC-10** 120 in./3050 mm extension cable (2 ends: 2-pin SAE connector)
- FBC-2** Battery connector cable (length 24 in./610 mm; end one: SAE connector, end two: 2 separate battery connectors, positive wire is fused.)
- YC-1** Y Connector allows you to connect up to two FLX-32's, two FLX-11's, or two FLX-5's in parallel.



Y Connector

## Quality Assurance, Proven Reliability

UNI-SOLAR modules comply with the following qualification tests:

- UL Listed (UL)
- Thermal Cycling
- Humidity-Freeze Test
- Damp Heat Test
- UV-Test
- Wet Insulation Test
- Mechanical Load Test
- Hail Impact Test
- Robustness of Terminations Test

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## Product Description

Each panel comes with 96 in./2438 mm of tinned wire with a 2-pin SAE-connector and is packaged with a 24 in./610 mm fused battery cable. An extension cable of 120 in./3050 mm is also available (two extension cables max). Typically the solar panel is connected directly to the battery. It can also be connected to any point on the electrical system where 12 volt is present. If a charge controller is used, it is placed in the line between the solar panel and the battery.

Bypass diodes are connected across each cell, allowing the modules to produce power even when partially shaded. A blocking diode is included within each potted junction box (edge connector) to prevent battery discharge into the module.

The cell assembly is sealed in flexible and durable weather resistant polymers that provide long life and high reliability.

Your UNI-SOLAR Distributor:

