

UNI-SOLARTM

Bekaert ECD Solar Systems LLC

CATALOG SHEET

ADVANCED FLEXIBLE SOLAR BATTERY CHARGERS

Flexible Solar Modules deliver the versatility you need with the power you demand!



FLEXIBLE



DURABLE



NO-GLASS



SHADOW TOLERANT



HIGH TEMP PERFORMANCE

Three popular sizes fit virtually any power need. And since each one has *UNI-SOLAR's* five year triple junction performance warranty, they're sure to perform for years to come.



SmartCharge FLX

MODEL FLX-5

The SmartCharge FLX-5 is sized to maintain 12 volt batteries. Provides up to 14 amp-hours (ideal conditions) per week of 12 volt battery recharging and automatically compensates for battery self-discharge.

MODEL FLX-11

The SmartCharge FLX-11 produces up to 29 amp-hours (ideal conditions) per week of recharging to meet your weekend long loads. It extends battery life for bilge pump operation and average trolling motor applications. Sized to match many hatchway covers and weighing only two pounds. Reduces risk of being caught with a dead battery.

MODEL FLX-32

The SmartCharge 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 SmartCharge FLX-32's to operate refrigeration units. The SmartCharge FLX-32 is the reliable power source of choice for today's independent vacationers.

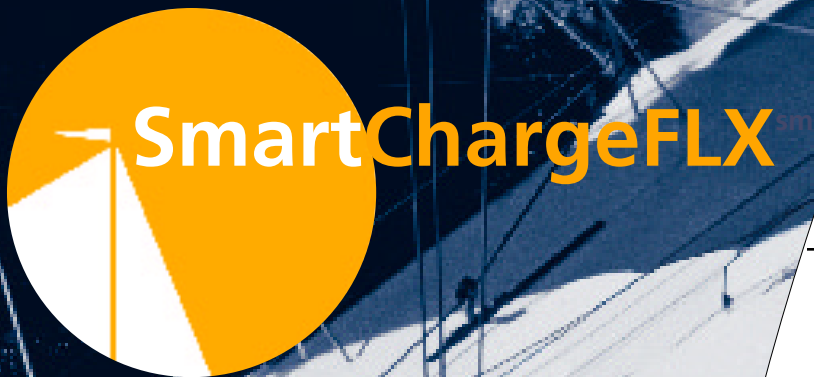
Bekaert ECD Solar Systems LLC

Corporate and Sales Office:

3800 Lapeer Road, Auburn Hills, MI 48326

248.475.0100 voice, 248.364.0510 fax

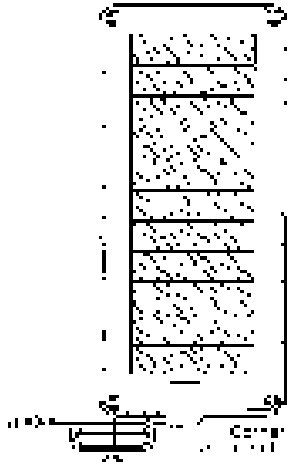
email: info@uni-solar.com, internet: <http://www.uni-solar.com>



Dimensions and Specifications

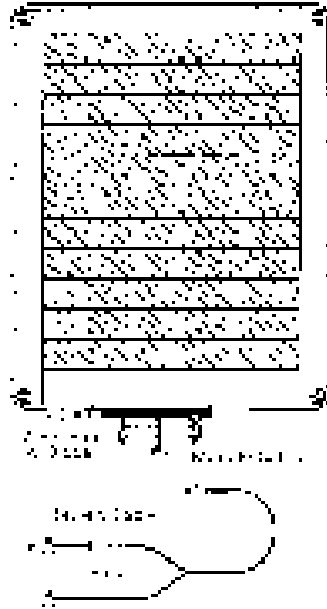
MODEL FLX-5

The perfect battery maintenance charger.



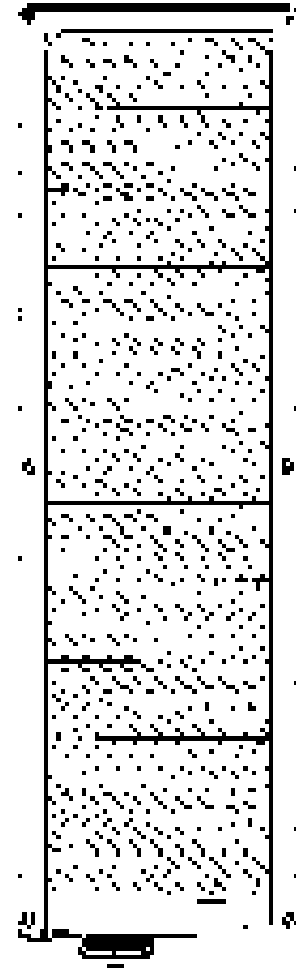
MODEL FLX-11

The ideal power source for weekending, coastal cruising, and fishing.



MODEL FLX-32

The full power solar charger for cruising, extended travel, and independent living.



How It Works

Bekaert ECD Solar Battery Chargers convert sunlight directly into electricity reliably and silently without fuel or moving parts. They are very low in maintenance and have a long life. United Solar Systems manufactures solar cells by depositing multiple layers of silicon alloy materials onto a thin stainless steel substrate in a patented roll-to-roll production process. The resulting solar cells are processed and connected in series to provide the required voltage. Eleven cells are connected in series to produce the required voltage for 12 volt battery charging. The cell assembly is laminated (sealed) in flexible and durable weather resistant polymers that provide long life and high reliability. Bypass diodes are connected across each cell to produce exceptional shadow tolerance performance.

Specifications

	FLX-5*	FLX-11	FLX-32
Rated Power (Watts)	5	10.3	32
Battery Voltage (Volts)	12	12	12
Typical Amp Hours/Day	2	4	12

* Bypass diodes not included in the FLX-5

During initial 8-10 weeks of operation the module has higher electrical output than rated output. The output power may be higher by 15%, the operating voltage may be higher by 11%, and the operating current may be higher by 4%.

Electrical specifications ($\pm 10\%$) 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. Performance may vary up to 10% from rated power due to low temperature operation, spectral and related effects. Blocking diode loss not included (-0.4V) in rating. Maximum system open circuit voltage 30 VDC. Specifications subject to change without notice. UNI-SOLAR® is a Trademark of United Solar Systems Corp.

Inner Box Dimensions Inches/mm

Model	Length	Width	Height	Weight Lbs/Kilos
FLX-5	22.06/560	10.25/260	1.44/37	1.74/0.79
FLX-11	21.94/557	16.88/429	1.44/37	2.82/1.28
FLX-32	56.44/1434	17.38/441	1.56/40	7.72/3.49

Item#/UPC

FLX-5	A20-5171-01/734842051776
FLX-11	A20-5172-01/734842051783
FLX-32	A20-5173-01/734842051790