CEDAR LINE™ PHOTOVOLTAIC MODULES



sunlight to electricity today



Photovoltaics (PV) provide clean, quiet, reliable electricity from sunlight where traditional sources are too distant, expensive, or environmentally unacceptable. With no moving parts to wear out, no emissions of any kind, and a limitless, readily-available power source, PV meets the need for electricity in places and ways that other sources simply cannot.

Outstanding flexibility for optimal system design

- EC-100 series modules are field-selectable to nominal 12- or 24-volt configurations.
- Junction boxes have two spare terminals for pass-through wiring and four knockouts, providing designers and installers with interconnection options for every application.

Easier, faster, more accurate wiring

- The junction box has a captive lid and fastener, eliminating the possibility of losing vital parts.
- The lid of the junction box even has a detent to hold it open during the wiring process.
- Generous junction box size, clear markings, and separate terminals for factory and field wiring help make wiring easy, accurate, and reliable.
- The junction box has options for blocking diode and/or bypass diode(s).

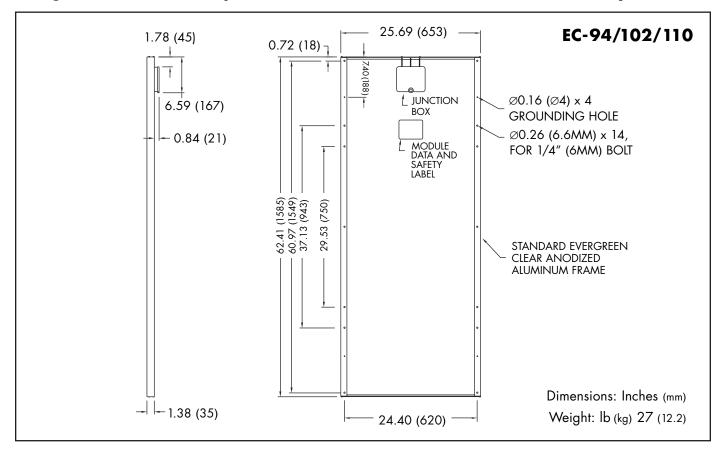
Advanced technology with promise for the future

- String Ribbon™ polycrystalline solar cells outperform thin films and achieve comparable performance to bulk crystalline technologies while using half as much silicon.
- The proprietary cell fabrication process is among the most environmentally friendly in the business.

Predictable, reliable, long-term performance

- Each module is individually tested to ensure field performance meets or exceeds specifications.
- Solar cells are matched to reduce internal losses and the possibility of hot spots.
- Rugged, durable anodized aluminum frame makes for strong, stable mechanical mounting.
- Industry standard EVA (Ethyl Vinyl Acetate) and TedlarTM construction protects solar cells from mechanical and environmental stress.

Designed for maximum performance: safe, reliable, versatile and easy to install.



ELECTRICAL SPECIFICATIONS*

	EC-94		EC-102		EC-110		
Рр	watts	94		102		110	
		12V	24V	12V	24V	12V	24V
Vp	volts	15.5	31.0	15.6	31.2	16.1	32.2
lp	amps	6.08	3.04	6.57	3.28	6.84	3.42
Voc	volts	20.0	40.0	20.0	40.0	20.0	40.0
lsc	amps	7.29	3.65	7.45	3.73	7.80	3.90
No. of cells		72		72		72	

^{*}At STC (Standard Test Conditions): 1000 W/m², 25° C cell temperature, AM 1.5. Specifications subject to change without notice. 20 year limited power warranty. Complete warranty available on request.

AVAILABLE FROM:

I-V CHARACTERISTICS*

8.0 5 10 15 20 25 30 35 40 7.0 EC-94 3.0 2.0 1.0 Voltage (V)

TEMPERATURE EFFECTS

 $Pp = -0.49\%/^{\circ}C$ $Vp = -0.53\%/^{\circ}C$

lp = +0.049%/°C

 $NOCT = 44^{\circ}C$

 $Voc = -0.41\%/^{\circ}C$

lsc = +0.088%/°C

SAFETY AND QUALITY TESTS

- IEC 1215 (IEC 503, ISPRA) Certified
- (UL) LISTED, Class C Fire Rating
- IEEE 1262 Certified
- TUV Safety Class II Certified
- (€



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