



BACKWOODS SOLAR WINTER 2008 - 2009 NEWSLETTER



(Photo courtesy of David Palmer, Alaska)

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NEW FEDERAL TAX CREDITS for RESIDENTIAL and COMMERCIAL SOLAR INSTALLATIONS: **SAVE 30%**



Today is the best time in history to purchase a residential solar electric system.

On October 3, 2008, the President signed the Emergency Economic Stabilization Act of 2008 into law. This legislation contains a number of tax incentives designed to encourage both individuals and businesses to make investments in solar energy.

The bill extends the 30% Investment Tax Credit for solar energy property for 8 years through December 31, 2016. Prior to the passage of this bill, residential solar electric systems had a \$2000.00 cap on the tax credit. This bill eliminates that cap on qualified solar electric property expenditures and is effective for property placed into service in 2009. **Equipment can be purchased in 2008 and still qualify for this tax credit.** It simply must be placed into service in 2009.

The bill allows individual tax payers to use the credit to offset AMT liability and to carry unused credits forward to the next succeeding taxable year. The \$2000.00 cap on solar water heating property was not lifted and remains in effect.

This link [VIEW FAQ](#) will answer frequently asked questions regarding this new legislation. A tax credit actually reduces your Federal tax liability dollar for dollar, it isn't just a deduction from your gross income!!

(photo courtesy of Lewis Cooper; Utah)

**SOLAR MODULES on SALE:
SOLARWORLD SW175 and MITSUBISHI MF125**


We have temporarily placed our SolarWorld SW175 and Mitsubishi MF125 watt solar modules on sale.

SolarWorld SW175: THE BEST MODULE on the MARKET



SOLAR WORLD residential power modules use quality single crystal cells with tempered glass front and aluminum mounting frame. The SW175 have MC cable leads already attached to its junction box. You will need our 30' MC4 cable with a male and female end. You cut this cable in half in order to plug it into the pre-installed MC cables and run from there to a combiner box. You may order this cable below. Tested at 50 PSI wind load; 1" hailstones impact at 52mph. SolarWorld is the highest quality construction. **We have only had one warranty return in over 20 years of selling SolarWorld products.** TWENTY FIVE YEAR WARRANTY on power output.

SolarWorld SW175 ship truck freight; Call for freight quote.

Item #	Watts	Amps	Volts	Size Inches	Weight	Price	Buy Now
SW 175 24 volt	175	4.9	35.7	63.4 x 31.9	33 LBS	Regularly: \$890 Sale Price: \$824	Add to cart 

MITSUBISHI MF125 UE


UL Listed 25 year Warranty Polycrystalline Silicon Module
High Efficiency; High Reliability; High Safety



Mitsubishi has applied leading-edge technology from its space-related applications to terrestrial systems to create high performance photovoltaic power-generation systems for an astonishing range of installations. Mitsubishi has successfully produced the first cells that do not require solder coatings. This accomplishment is a milestone in the development of environmentally friendly composite materials.


Solder free; Black surface field structure; Anti-reflective coating; with MC4 multi contact cabling.

Click here to view the [Limited Warranty](#).

Model	Amps	Volts	Size	Price	Buy Now
MF125 125 watts	7.23	17.3	58.9" x 26.5" 29.8 lbs	Regularly: \$685 On Sale: \$630	Add to cart 

FREE UPS SHIPPING IN LOWER 48 STATES
All other locations contact us for shipping arrangements

Our O-MC4 Cable is required for our SolarWorld SW175 and Mitsubishi MF125 modules.

	<p>O-MC4 CABLE: For our SolarWorld SW175 and Mitsubishi MF125 modules: 30 feet long, locking, single conductor, with one female MC connector on one end and one male MC connector on the other</p>	<p>Add to cart </p>
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end. Designed to be cut-in half and attached to the corresponding female and male MC connectors already attached to a solar module's junction box.....\$30	
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2009 CATALOG COVER PHOTO CONTEST



Another year and another catalog will go to print. Backwoods Solar will publish its 2009 catalog by February of this year and so we invite you to submit a photo or photos for its cover. The layout is "portrait" style which means it has a vertical orientation rather than horizontal. Please keep this layout in mind when choosing a photo to submit. The folks that submit the winning entry will receive a one time 10% discount on any single order placed after the photo is selected and the end of 2009. You may submit a photo within the body of an email sent to info@backwoodssolar.com or via a

disk that you mail to us. In general, attachments to an email will not be opened unless we know you.

Once the photo is selected, we will ask the winner to provide a written text which describes their alternatively powered home. We will edit this text to the inside front cover of the catalog which mails to tens of thousands of households nationwide and even internationally. Many thanks to everyone that chooses to participate. We had a great response for the 2008 catalog photo and hope for an even better one this time.

(Photo courtesy of Jay Beedle of SE Alaska)

TROJAN INTRODUCES A NEW LINE of FLOODED LEAD ACID BATTERIES and BATTERY PRICES from TROJAN and SURRETTE HAVE DECREASED

TROJAN L-16 RE and L-16 2 volt High Capacity BATTERIES NEW CAPACITY RATINGS-- NOW 370 AMP-HOURS for the RE and 1110 AMP-HOURS for the 2 volt.



Trojan L-16RE is a 370 amp hour industrial size 6 volt battery weighing 118 pounds. The L16 2 volt is a 1110 amp hour industrial size 2 volt battery weighing 118 pounds as well. Lifting handles are included. They are 30% taller than auto or golf cart batteries, 12" x 7" x 18 inches tall, so they take less floor space for a given battery capacity. Typical life is 8 - 11 years. L16 RE and 2 volt are High Capacity models in a red ribbed case with two handles, Trojan's best: Not the industry "standard" L-16 model which has less capacity and less longevity. Trojan has an unparalleled reputation for reliability in home power systems.



The L16 RE battery is 6 volts, made of three 2-volt cells wired in series in one unit. Six-volt batteries are series connected in pairs for 12 volts, or in strings of four batteries for 24 volts or 8 to make 48 volts. Then several series strings may be parallel connected to add more ampere-hour capacity. Interconnect diagrams are supplied. Each 12 or 24 volt series string of L16 RE is rated 370 Ampere Hours, so two strings are 740 Ampere-Hours, 3 are 1110 A. H.... etc.

The L16 2 volt battery is 2 volts, made of three 2-volt cells wired in parallel in one unit. 2 volt batteries are series connected in groups of six for 12 volts, or in groups of twelve batteries for 24 volts or twenty four to make 48 volts. Then several series strings may be parallel connected to add more ampere-hour capacity. Interconnect diagrams are supplied. Each 12 or 24 volt series string of L16 2 volt is rated 1110 Ampere Hours, so two strings are 2220 Ampere-Hours, 3 are 3330 A. H.... etc.

Trojan offers a free replacement warranty for the first two years of service and an additional five year, pro-rated warranty on the L16RE and L16

2 volt batteries for renewable energy systems (assuming Trojan defined, proper care)!!

FREE ACCESSORIES included with batteries: the [Battery Book](#), and a Freas #1 [glass hydrometer](#). Distant customers call for pick-up locations near you, usually at no shipping cost.

B- L16RE: Trojan L-16RE 6 VOLT; 370 ah batteries & accessories EACH: \$335	Add to cart 
B- L16 2 VOLT: Trojan L-16 2 VOLT; 1110 ah batteries & accessories EACH: \$335	Add to cart 


TROJAN T-105 BATTERIES 225 AMP-HOUR RATING

Electric Vehicle or Golf Cart Batteries are easier to lift at 65 pounds each, size 10" x 7" x 11". These are a popular and economical battery for home power systems. This mass produced consumer battery has the best price per amp-hour of any quality battery.



Each battery is 6 volts, made of three 2-volt cells in one unit. Six-volt batteries are series connected in pairs for 12 volts, or in strings of four batteries for 24 volts, or 8 to make 48 volts. Then several of these series strings may be parallel connected to add more ampere-hour capacity. Each series string is rated 225 ampere hours, so two strings are 450 Ampere-Hours, 3 are 675 A.H., 4 are 900 A.H., 5 are 1125 A.H., etc. Interconnect diagrams are supplied. Life expectancy is 4 to 6 years. 12 month warranty.

FREE ACCESSORIES included with Trojan batteries are the [Battery Book](#), and a Freas #1 [glass hydrometer](#). Distant customers call for pick-up locations near you, usually at no shipping cost.

B-T105: Trojan T-105 Batteries & accessories NEW Lower Price: EACH: \$135	Add to cart 
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Order your choice of [battery interconnect cables](#) for the L16REs and T105s.

YOUR STORY for our NEWSLETTER WANTED

Backwoods Solar would like to share your "off-grid" story in our newsletter and we would offer a \$150.00 credit on your Backwoods Solar account in exchange for a story that gets published. We would look for a discussion of your renewable energy system and its integration into your way of life. It can be more or less technical and should include photos. Email submissions are preferred but we will happily entertain all forms of entry. If you have any questions, feel free to email us info@backwoodssolar.com or give us a call 208-263-4290 or mail us: 1589 Rapid Lightning Creek Rd; Sandpoint, ID 83864.

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RENEWABLE ENERGY "HELPERS" NATIONWIDE NEEDED



Historically, Backwoods Solar has maintained a list of Solar Helpers. This list represents installation services offered by licensed electricians, certified solar experts, etc.

However we have found that the vast majority of our customers want to install their own systems and would actually like to visit or speak with or write a "neighbor" that has a renewable energy system in place, prior to their installation.

To facilitate this interaction, Backwoods Solar would like to compile a list of people nationwide that have renewable energy systems if they're willing to let interested individuals contact them. We would maintain a list of Renewable Energy Helpers on our website and only release the information approved by the Renewable Energy Helper. This information may include a physical address, a phone/fax number, an email address or any combination of these details. We respect the privacy of anyone willing to share their renewable energy system with others and we want it to happen on their terms.

You may find that your county inspector requires a licensed electrician to sign off on your installation and you may want that electrician's assistance in general. We know that the experience gained by "doing-it-yourself" is invaluable. You will remove the mystery of running your own power station and you will develop an intimate understanding of each component. This familiarity simply doesn't happen if you do not participate in the installation process.

So if you share our opinion and would be willing to open your home to those folks that are new to this renewable energy arena, please let us know.

The photo shows Terry Graybeal (Backwoods Solar employee) and his wife Martha at their hydro intake.
