

12 VOLT LIGHTING PRODUCTS

Low voltage DC bulbs are the most efficient light sources for using electrical energy produced with photovoltaic, wind and small hydro power systems. With low voltage DC lights, there are no power penalties involved to operate these directly from a storage battery. If lighting is operated by an inverter, which changes the primary DC power of the system to 110 VAC, then power losses will be on the order of 15 to 25%—depending on the light type. While low voltage lighting products may cost more than their 110 VAC counterparts, they will generally last 5 to 10 times longer and will more than pay for themselves in the power they save the user and therefore in the size of power system required.



MR-16 12 Volt Flood Lamps

These are the most efficient type of incandescent (non-fluorescent) lighting. A tungsten-halogen bulb with a multifaceted diachronic reflector provides sharp, clean light over a large area with excellent color rendition.

Halogen light operation is not affected by temperature. These bulbs have a two pin base and fit into the MR-16 adapter below.

Catalog#	Watts	Glass Cover	Price
65-827	20	Yes	\$11.50
65-829	50	Yes	\$11.50



12V Halogen BiPin Lamps

These tiny halogen lamps are very bright. They are recommended for locations where they will not get wet or be looked directly at. They fit into the MR-16 adapter as well.

65-025	5, 10, & 20 Watts	\$11
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MR-16 Medium Base Adapter

This adapter accepts any of the MR-16 lamps above, allowing them to be used in any standard medium base socket. Lamps plug securely into holes in the adapter and can be used safely even with the bulb pointing downwards.

65-120	MR-16 Adapter	\$9.50
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12V & 24V Medium-Base Bulbs

These low-cost bulbs are the least efficient of all lamps that we sell, but they are still more than 30% more efficient than 120-volt lamps. They have a standard medium base, so they fit into standard sockets found in most 110 VAC fixtures. AC lamp sockets rated for up to 300 watts at 110 VAC can usually handle up to 50 watts at 12 VDC. Use 600-watt rated sockets for 100-watt 12-volt bulbs. 300-watt rated sockets are good for 100 watts at 24 volts.



65-905	25W/12V	\$5.50
65-900	50W/12V	\$5.50
65-901	75W/12V	\$5.50
65-902	100W/12V	\$5.50
65-904	25W/24V	\$7.50
65-903	50W/24V	\$7.50
65-906	100W/24V	\$8.50

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LED Lights

Our LED lights have a lifetime of at least 50,000 hours, probably 80,000 hours and maybe 100,000 hours. A big advantage of LED lights is that they will start at full brightness even in the cold. The life and efficiency of LED lights increases in cold temperatures so these LED lamps are ideal for porches, wood sheds, garages and shops. The life is not affected by the number of On Off cycles making these LED lights well suited to high intermittent use areas such as bathrooms, entrance ways, and pantries. LED is an acronym for Light Emitting Diode, this is a solid state device and so any orientation is acceptable. Polarity doesn't matter for our 12 and 24 volt DC LED's.

MR16-27LED Floodlights

This is a small focused LED light. 27 LED elements give a white light suitable for tasks or reading. This LED light uses only 1.2 watts of power, has extremely long life, unlimited ON/Off cycles, immediate cold starting and uses the G5.3 two pin base common for many track lights. It is one of our most popular LED lights. This is a great light for 12V DC track lighting.

67-160	MR16 27LED bi-pin base	\$17.50
67-161	MR16 33LED bi-pin base	\$29.90
67-162	MR16 33LED standard medium base	\$29.90



PAR30-99LED Floodlight

This is a sturdy focused 99 LED light. This LED light uses only 4.6 watts of power, has extremely long life, unlimited ON/Off cycles, immediate cold starting and uses the standard medium Edison screw base

67-345	PAR30-45LED Floodlight	\$25.95
67-399	PAR30-99LED Floodlight	\$49.95
67-345-24	PAR30-45LED Floodlight 24VDC	\$28.95
67-399-24	PAR30-99LED Floodlight 24VDC	\$54.95



LED bulbs 3-9W, 12V, 24V and 120VAC, E26 base

This selection of 12 or 24 volt DC LED lights (some also available in 120VAC) are all particularly well suited for use with solar, wind turbine, micro hydro and marine systems that use a battery. All of these lights listed below use a standard E26 Edison base (regular household light fixture) unless otherwise noted. These bulbs all have extremely long life, unlimited ON/OFF cycles and immediate starting and full brightness in cold temperatures.

Available in "Daylight" 6500K (#-1), "Soft Daylight" 5000K (#-2) and "Warm White" 3000K (#-3)

67-490	10W LED bulb, 950 lumens, 12CDC	\$ 33.50
67-491	10W LED bulb, 950 lumens, 24VDC	\$ 33.50
67-460	7W LED bulb, 560 lumens, 12VDC	\$ 31.50
67-461	7W LED bulb, 560 lumens, 24VDC	\$ 31.50
67-462	7W LED bulb, 560 lumens, 120VAC	\$
67-470	5W LED bulb, 400 lumens, 12VDC	\$ 28.50
67-471	5W LED bulb, 400 lumens, 24VDC	\$ 28.50
67-472	5W LED bulb, 400 lumens, 120VAC	\$
67-480	3W LED bulb, 240 lumens, 12VDC	\$ 24.50
67-481	3W LED bulb, 240 lumens, 24VDC	\$ 24.50
67-482	3W LED bulb, 240 lumens, 120VAC	\$



LED Outdoor Floodlights

An attractive, sturdy and waterproof aluminum LED floodlight (16.5 x 14 x 11.4 cm) including a junction box with a seal around the cover and a watertight gland for the cable, stainless steel screws and bracket. This LED flood light is reverse polarity enabled so you can connect either wire to positive. 99 bright white LEDs give a focused light (55 degree beam angle) for outdoor illumination and use only 6.5 watts of power. Most people can still read a newspaper 75 feet (23m) from this LED floodlight. Great for deck or dock lighting.

67-510	99LED standard 12VDC 7W	\$ 98.95
67-511	99LED compact 12VDC 7W	\$102.65
67-513	99LED compact 24VDC 7W	\$104.50
67-514	99LED compact 120VAC 7W	\$104.50
67-525	198LED standard 12VDC 14W	\$184.50
67-526	198LED compact 12VDC 14W	\$184.50
67-529	198LED compact 120VAC 14W	\$189.90



DC FLUORESCENT & COMPACT FLUORESCENT LIGHTS

DC fluorescent lights use up to 75% less energy than incandescent lamps. Optimum cycle on/off time, for maximum tube life, is 3 hours on before turning the light off. This is for all fluorescent light types. Fluorescent lights are polarity sensitive.

TFT Low Voltage Lighting

TFT offers you maximum energy saving. Fixtures with high-performance compact fluorescent tubes. The different models are available in either 12 or 24 volts DC. They feature no electromagnetic or radio interference which may affect telecommunication or navigation equipment, instant start even at temperatures as low as -18 C, and reverse polarity protection. Enclosed circuit and humidity protection. Illumination is constant as voltage drops. Warranty 2 years on ballast.

TFT PL Models

These fixtures have an attractive looking exterior and are available in three different watt sizes. They draw .6amps, 1.0 amps, and 1.4 amps respectively. Dimensions are: 1.5" x 2.48" x 7.9", 12" and 24".

Catalogue#	Model #	Watts	Amps 12/24	Volts	Price	Volts	Price
65-007	EWL-PL-7	7	0.6/0.3	12	\$84	24	\$94
65-014	EWL-PL-11	11	1.0/0.5	12	\$89	24	\$99
65-015	EWL-PL-14	14	1.4/0.7	12	\$104	24	\$114
Replacement Tubes		7 / 11w			\$13		
		14w			\$19		



TFT PLC Models

This compact fluorescent comes with the tube and ballast. It is available in 13 watts.

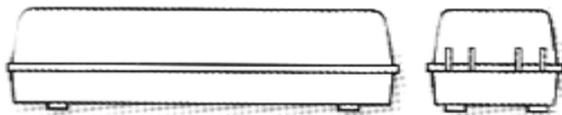
65-013	EWL-PLC-13	13 watts	12v/1.1 amps or 24v/.55 amps	12V \$78	24V \$89
Replacement Tubes				\$21	



TFT WL Models

The WL models are adapted for outdoor use.

65-107	EWL-WL-7	7 watts	12V \$109	24V \$119
65-111	EWL-WL-11	11 watts	\$119	\$126



EWL-WL-11



EWL-WL-7

Enerwatt Compact Fluorescent Lights

Here is our best buy in 12V DC compact fluorescent lighting. Features • Working Voltage: 10 to 14.5 VDC • Working temperature: -10 to 40C • Life expectancy: 5500 to 6000 Hrs. • Reverse polarity protected • Color (temperature) white 4200K.

65-125	EWL-V7-12V, 7watts	\$10
65-126	EWL-V15-12V, 15 watts	\$10
65-127	EWL-V23-12V, 23 watts	\$10



THIN LITE DC FLUORESCENT LIGHTS

Thin-lite 181 20 Watt 12 and 24 Volt Light

This fixture is available in two versions. One operates on 12 volts, the other on 24 volt. The fixture has a single 20 watt F20T12/CW fluorescent tube and draws 1.6 amps at either voltage. Dimensions are: 24" x 3-5/8" x 3-1/2". Light output is: 1250 lumens. It does not have a built-in on/off switch.



66-181	Thin-lite 181 20W 12V Light	\$75
66-281	Thin-lite 181 20W 24V Light	\$95

Thin-lite Model 957 36 Watt 12V light

This fixture has a single 36 watt OSRAM compact fluorescent light tube. It draws 2.45 amps. It has built-in RFI suppression, so does not interfere with low-band AM radio reception as other fluorescent light sometimes do. The dimensions are: 18-7/8" x 4-1/2" x 1-1/2". Light output is: 2618 lumens.



66-957	Thin-lite 957 36 W 12V Light	\$89
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Thin-lite 191 Model 8 Watt 12 Volt Light

This fixture has a single 8 watt F8T5/CW fluorescent tube and draws 0.9 amps. Dimensions are: 12-3/8" x 2-1/4" x 2-6/16". Light output: 400 lumens. It has an on/off switch on the end.



66-191	Thin-lite 191 8 W 12V Light	\$49
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Thin-lite Model 193 15 Watt 12 Volt Light

This fixture has a single 15 watt F15T8/CW fluorescent tube and draws 1.3 amps. Dimensions are: 18-1/8" x 2-1/4" x 2-7/16". Light output is: 870 lumens. It has an on/off switch on the end.

66-193	Thin-lite 193 15W 12V Light	\$49
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Thin-lite Model 194 30 Watt 12 Volt Light

This fixture has two 15 watt F15T8/CW fluorescent tubes which draw 2.1 amps. Dimensions are: 18-1/8" x 5-1/2" x 1-5/8". Light output is: 1740 lumens. It has an on/off switch on the end.

66-194	Thin-lite 194 30W 12V Light	\$69
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Thin-lite models
191, 193, 194

12 VOLT LIGHTING PRODUCTS

Osram Copilot Halogen Lights

These 12 volt 5 watt halogen lights make excellent reading lights and work well for close up work. The lights use very little power but focus a large amount of quality light in a small area. The base is designed to be permanently mounted to the work surface with two screws or plugged into a cigarette lighter plug in the case of the 7" model.

68-024	5W, 12V	20"	\$40
68-025	5W, 12V	12"	\$40
68-026	5W, 12V	8"	\$40
68-028	5 Watt Bulb		\$8



RAB

12V Motion Sensor Switch

RAB motion and heat sensing switch is 12-volt DC powered so it works full time even if your inverter is in standby or off. Turns lights on at approach, and holds for adjustable time, 5 seconds to 20 minutes after motion stops. Sensitivity distance is adjust-able, up to about 50 feet out, farther in colder weather. Connect directly to any 12-volt light, or use a 12-volt relay to switch 120-volt lights. Set for night only operation, or use as security alarm, by setting for day/night operation. Switches - amp DC, uses only 7 milliamps at idle, 40 milliamps when activating. Switch uses only 7 milliamps at idle. 1-year warranty.

60-035	12V Motion Sensor	\$149
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