

Sensible Energy Alternatives

Glenergy Inc.

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Store Hours

Monday-Friday Saturday-Sunday 8:30 am to 4:30 pm Closed



Sensible Energy Alternatives



Inside:

- Solar-Powered Lamps
- 12 V CD Light Fixtures
- 12 V DC Light Bulbs:
 LED Compact Fluorescent
- Sign Lighting
- Solar Panels
- Charge Controllers
- Inverters
- Batteries
- ...and much more!



April 2012

Our Mission



Glenergy's mission is to provide solar lights and power to people throughout the world, especially those who do not have access to grid electricity or who have only limited access to unreliable grids. We believe that small amounts of solar electric power (distributed with applications such as long-lived, energy-efficient LED lights) can both improve quality of life and reduce greenhouse gas emissions.





Glenergy Offices in East Africa

TANZANIA

Glenergy Solutions Ltd. Contact: Jonathan Lyimo

PO Box 4745, Plot No 111 Block 46 Kinondoni Opposite Kijitonyama UDSM Hostel Dar es Salaam TANZANIA

Email: jonathan@glenergy.ca Telephone/Fax: +255 22 2773 389 Cell Phone: +255 754 759 981 or +255 787 565 565

KENYA

Contact: Rajesh Ghai

Cell Phone: +254 75 2700 520 or + 254 72 2700 520

UGANDA

Glenergy Uganda Ltd. Contact: Richard Onzima

Plot 879 Centenary Road, Namirembe Hill P.O Box 14003 Kampala UGANDA

Email: richard@glenergy.ca Telephone: +256 41 4670 786 Cell Phone: +256 70 2302 825 or + 256 75 2302 825





Table of Contents

	Page
Solar Lamps and Lanterns	
EDULIGHT Series	1
KN Series	2
Telescopic Lamp	3
Light Bulbs	
12 Volt DC LED Bulbs	4
12 Volt DC CFL Bulbs	6
24 Volt DC CFL Bulbs	10
AC CFL Bulbs	10
12 Volt DC Light Fixtures	
LED Light Fixtures	11
Linear Fluorescent Fixtures and Tubes	12
LED Strip Lighting	13
Sign Lighting	19
Flood Lights	20
Charging Options	
Rechargeable Batteries/Battery Packs	21
AC Adapters	21
Battery Chargers	22
Battery Testers	22
Solar Panels	23

Table of Contents

	Page
System Components	
System Estimate Form	24
Charge Controllers	26
Inverters	28
System Accessories	31
Sealed Batteries	32
Flooded Batteries	33
Dealer List	34
Solar Lighting for World Development	36
Glenergy Offices in East Africa	38

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Solar Lighting for World Development

THE IMPACT & BENEFITS

HEALTH & SAFETY

Noxious fumes, emitted from the burning of kerosene, cause respiratory and pulmonary infections, lung and throat cancers, eye infections and other severe illness within the household. The WHO reports millions of annual deaths in the developing world caused from indoor air pollution. Tipped kerosene lanterns and candles can cause fire catastrophes resulting in burns and fatalities. Whereas, reliable solar powered LED lighting provides household security after dark, improves indoor air quality and health, and presents no fire hazard.

GENDER EQUALITY

Women and girls carry the burden of collecting fuel for lighting and cooking thereby reducing their time available to spend on productive activities such as education, income generation, and community development. Women and girls suffer disproportionately from reduced opportunity after dark; sustainable access to light empowers women.

ENVIRONMENTAL PROTECTION

An estimated 265 million tones of greenhouse gases are emitted annually from burning kerosene. The accelerating effects of climate change and deforestation are felt most dramatically in developing countries. Solar lighting helps to ensures environmental sustainability.



EDUCATION AND LITERACY

Modern, quality lighting allows for children and other household members to study after sunset. School retention and test grades are directly and positively correlated with good quality lighting.

POVERTY REDUCTION

Rural, poor households often spend up to 40% of their total income on inefficient, polluting and hazardous fuels for lighting, such as kerosene. On a per-kilowatt basis, this translates to costing 5 to 100 times more than modern lighting and electricity. Ongoing kerosene expenditure diverts money away from food, health services. housing and other basic needs in poor countries, whereas modern lighting allows for economic development and income generating activities after dark. As such, the expansion of access to affordable, modern lighting is directly related to the eradication of endemic poverty.

Solar Lighting for World Development

GLENERGY IN THE DEVELOPING WORLD

One in four people, globally, lack access to electricity. This number is increasing.

This population for the most part relies on fuel-based lighting (think kerosene), which is expensive, polluting, hazardous and inefficient.

Enabling the transition from kerosene to solar lighting

Alongside promoting alternative energy in North America, Glenergy is committed to the transition from kerosene to clean, safe and affordable solar lighting for those who need it most.

From our two Glenergy hubs in Tanzania and Uganda, we are distributing our KN series of solar powered LED lanterns, launching village-level entrepreneurs with solar charging micro-businesses, and working with NGOs and philanthropic entrepreneurs on community development projects across East Africa.

Modern lighting changes people's lives. So far, Glenergy has delivered solar lighting to 48 countries.

We are actively seeking social investments to magnify impact. Your donation or loan is leveraged many times over. Capitalization of our microcredit fund gives village-level entrepreneurs access to start-up capital for their micro-solar business. As they repay their loan, the money is used again to start another entrepreneur.

Your social investment in solar lighting has a positive impact on the financial and physical well-being of people in developing countries around the world.



Page 36

Solar Lamps and Lanterns

EDULIGHT Series

The **EDULIGHT series** offers multi-purposed, solarpowered lamps. All can be configured with 1W or 3W LED bulbs or with one of several types of LED and fluorescent bulbs. Battery-powered units can be charged from 1W to 3W solar panels. The desk lamp comes with a 1W LED bulb while the others come with 3W CFL bulbs (upgrade to 3W LED available). An easy, off-grid lighting system can also be assembled using Edulight lamps without batteries and the plug and play Glenergy Distribution Box connected to a 12V solar system. Please specify your preferred color when ordering EDULIGHT products: Red, White, Black, Royal Blue or Light Blue

Item	Part #	Price (\$)
Desk Lamp with LED	DL	32 20 w/o battery
Wall Lamp with CFL	WL	25
Table Lamp with CFL	TL	28 15 w/o battery

Edulight Accessories	Part #	Price (\$)
1 W Solar Panel	SP 1A	10
3 W Solar Panel	SP 3A	20
AC Adaptor	AC 128	10
Replacement Battery Pack	BPH 25	15
3 Watt LED upgrade	LED CW3	16

Ask about NGO pricing on EDULIGHT products!

Solar Lamps and Lanterns

KN Series

Part #	LEDs	Battery (Ah at 6V)	Price (\$)
KN3024	24	4	30
KN3324	24	2.5	20
KN3060	60	4	35
KN2387	4	4	40

The **KN series** of battery powered LED lamps, lanterns and fan are ideal for remote solar projects. Extremely versatile, they can be charged from small (2-4W) solar panels or from 220V AC with provided cords. While these have been developed to support solar lighting micro businesses in Africa, they are as useful in a North American campground or cottage. The KN3060 and KN3324 models have three brightness settings and can be hung on the wall or ceiling or can be placed on a shelf or table. The KN3024 is a very versatile 24-LED lantern, suitable for hanging, carrying, or placing on a surface.

Accessories	Part #	Price (\$)
1 W Solar Panel	SP 1A	10
2 W Solar Panel	SP 2A	15
4 W Solar Panel	SP 4A	25



KN3024



KN3324



KN3060



Our Dealers

CANADA (cont'd)

Ontario

EMSM Electric 519-669-4773 elam@pobox.com

Northern Lights Energy Systems 705-246-2073 info@sunlinksolartracker.com

Fur Harvesters Auction 705-495-4688 traps@furharvesters.com

Quebec

Green Force Initiative 613-2972803 <u>gfi inc@live.ca</u>

Green Lake Solar 613-482-8136 greenlakesolar@lycos.com

New Brunswick

Clear Power Solutions 506-653-9021 jason.roach@nb.aibn.com

Nova Scotia

Green Power Labs Inc. 902-466-6475 ext.5 marlene.moore@greenpowerlabs.com Frank's Alternative Energy 807-964-2050 <u>sunwind@tbaytel.net</u>

Sun Volts Unlimited 705-384-2214 sharon@sunvoltssolar.com

Green Energy Generation 519-451-7536 jimcrawfordgeg@gmail.com

Lumisolution 418-522-5693 info@lumisolution.com

Newfoundland

Newfound Energies 709-895-6626 gerry@nfenergies.com



CANADA

British Columbia

Epscan Industries Ltd. 250-782-9656 danp@epscan.com Northern Auto Electric 250-785-5710 nae@telus.net

Alberta

Ibco Enterprise Ltd. 403-443-3405 <u>dwayneibsen@gmail.com</u> Command Gates Corp. 403-227-0565 shop@commandgate.com

Try Light 403-860-2228 <u>colpitt@telus.net</u> The Outdoor Lighting Company 403-256-1605 tjameson@outdoorlightingcompany.net

Saskatchewan

Solar K 306-883-3040 <u>solarkproducts@sasktel.net</u>

Manitoba

Evolve Green 204-320-9777 support@evolvegreen.ca Solar Solutions 204-632-5554 tim@solarengineers.com

Ontario

Eco Alternative Energy (Kingston) 613-541-1291 <u>kingston@ecoaltenergy.com</u>

Eco Alternative Energy (Sharbot Lake) 613-279-1076 <u>sharbotlake@ecoaltenergy.com</u>

Eco Alternative Energy (Peterborough) 705-742-9997 peterborough@ecoaltenergy.com Eco Alternative Energy (Toronto) 416-907-5848 dwilson@ecoaltenergy.com

Solar Lamps and Lanterns

Telescopic Lamp

The elegantly-styled, rechargeable Telescopic Lamp is a compact marvel that offers a bright, cool, and flexible way to light. With 28 LEDs, the Telescopic Lamp offers three light settings. Measuring just 18x5 cm when fully closed, this 28 LED lamp will reach the darkest of corners with its smooth action, 3-piece telescopic arm. The arm extends from 17 cm to a maximum of 34 cm. A rotating head adds further practicality as it turns a full 315°!

When fully charged, the Telescopic Lamp (with 4 or 6 Ni-MH batteries) will run for up to 35 hours on its lowest setting and over 5 hours on its highest. With no power cable to worry about, the Telescopic Lamp can be used anywhere that you need light.



Telescopic Lamp Options	Part #	Price (\$)
Telescopic Lamp (6 Ni-MH Batteries)	SL	70
Telescopic Lamp (4 Ni-MH Batteries)	SL 4	55
1 W Solar Panel	SP1 1	10
2 W Solar Panel	SP2A 1	15
3 W Solar Panel	SP3 1	20

12 VDC Bulbs

LED Bulbs

LED bulbs are perfect for situations where directed, low power consumption lighting is required. In places where bulb-changing is awkward, dangerous, or impossible, LEDs provide an excellent long-term solution.

	Part#: LB18-B Voltage:12 V DC	Colour: White Type: 18 LED	Base: E27 Power: 1 W Price: \$10.00
	Part#: LBR18-B Voltage:12 V DC	Colour: Red Type: 18 LED	Base: E27 Power: 1 W Price: \$8.00
	Part#: LB18-P Voltage:12 V DC	Colour: White Type: 18 LEDs	Base: 2 Pin Power: 1 W Price: \$10.00
-	Part#: LB6-P Voltage: 12 V DC	Colour: White/Warm White Type: 6 LEDs	Base: 2 Pin Power: 0.3 W Price: \$8.00
a Refe	Part#: LB18-G Voltage: 12 V DC	Colour: White/Warm White Type: 18 LEDs	Base: GU10 Power: 1 W Price: \$10.00
	Part #: G40-12D Voltage: 12 V DC	Colour: White/ Warm Whit Type: 12 LEDs	te Base: E27 Power: 0.6 W Price: \$4.00
	Part #: G40-24D Voltage: 12 V DC	Colour: White/Warm Whi Type: 24 LEDs	te Base: E27 Power: 1.2 W Price: \$6.00

Flooded Batteries

Part #	Ah	Wh	Price (\$)
US-2000	216	1296	220.00
S460	350	2100	410.00
S530	400	2400	450.00
S600	450	2700	517.00
4KS 21 PS	1100	4400	1300.00
$4\mathrm{KS}\ 25\ \mathrm{PS}$	1350	5400	1500.00



US-2000



S530



Page 4

Sealed Batteries

Part #	Ah	Wh	Price (\$)
PS-1290	9	108	35.00
PS-1212	12	144	50.00
PS-1218	18	216	90.00
PS-12350	35	420	130.00
PS-12550	55	660	195.00
PS-12750	75	900	270.00
8A27	105	1260	260.00
GEL-12165	165	1980	390.00



PS-1290



GEL-12165



PS-12350



8A27

12 V DC Bulbs

LED Bulbs

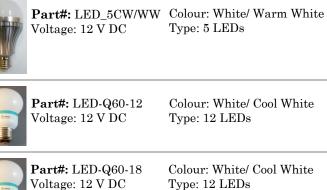


Part#: LED-3WW/CW Colour: White/ Warm White Voltage: 12 V DC Type: 3 LEDs

Base: E27 Power: 3 W Price: \$28.00

Base: E27

Power: 5 W Price: \$40.00



Type: 12 LEDs

Type: 5 LEDs

Base: E27 Power: 1W Price: \$15.00

Colour: White/ Cool White Type: 12 LEDs

Base: E27 Power: 1.5W Price: \$15.00

Base: Bayonet

Price: \$10.00

Part#: LED_3.6WW/CW Colour: White/ Warm White Base: E27 Power: 3.6 W Type: 1 LED Price: \$28.00

Colour: White/ Cool White

Voltage: 12V

Part#: LED-1156F Voltage: 12V DC

Automotive bulb Type: 20 LEDs

Part #: C30-30SMD Colour: White/ Warm White Type: 30 LEDs

Part #: SHL-66DF6 Voltage: 12V

Colour: White/Warm White Type: 66 LEDs

Base: E27 Power: 3.3 W Price: \$15.00

Base: E14

Power: 1.5 W

Price: \$9.00

12 V DC Bulbs

Compact Fluorescent Bulbs

The compact fluorescent lamp (CFL) is a practical, energy-saving solution. CFLs have proven themselves to be up to four times more efficient than incandescent bulbs and are ideal for lighting small to medium spaces. With medium, screw-in (Edison) bases, CFLs are easy to insert into most fixtures. The following bulbs are available in a variety of voltages, wattages, shapes and colours in order to meet the individual needs of each customer.



CFL Colour Temperatures

6400K 4200K 2700K Daylight Cool White Soft White



System Accessories

Part #: TM-2020 Function: Trimetric meter battery monitor Voltage: 12/24 V DC



Part #: MATE Function: Management tool for Outback products Voltage: 12/24 V DC



Price: MATE \$320.00 MATE 2 \$340.00

Part #: FlexNet DC Function: DC system monitoring Battery Voltage: 8-80 V DC

Price: \$400.00



Inverters - SSW Series

Part #	Feature	Output (Watts)	Fuse Rating (Amp)	Price (\$)
SSW-350-12A	USB Charging Port	350	50	132.00
SSW-600-12A	USB Charging Port	600	80	222.00
SSW-1000-12A	Remote LCD Display	1000	150	372.00
FREE! LCD Remote Control SSW-R1-12 SSW-1500-12A	Remote LCD Display	1500	200	454.00
FREE! LCD Remote Control SSW-R1-12 SSW-2000-12A	Remote LCD Display	2000	300	527.00

12 V DC Bulbs

Compact Fluorescent Bulbs*

Compact Fluorescents: U Type

Part #	Colour	Power	Price (\$)	
CFD3U2	2700K	3W	10.09	\$7.50
CFD3U4	4200K	3W	10.09	\$7.50
CFD3U6	6400K	3W	10.00	\$7.50
CFD5U4	4200K	$5\mathrm{W}$	10.09	\$7.50
CFD5U6	6400K	$5\mathrm{W}$	10.09	\$7.50
CFD9U2	2700K	9W	11.00	\$8.25
CFD9U4	4200K	9W	11.00	\$8.25
CFD9U6	6400K	9W	11.00	\$8.25
CFD11U2	2700K	11W	11.00	\$8.25
CFD11U4	4200K	11W	11.00	\$8.25
CFD11U6	6400K	11W	11.00	\$8.25
CFD15U2	2700K	15W	12.00	\$9.00
CFD15U4	4200K	15W	12.00	\$9.00
CFD15U6	6400K	15W	12.00	\$9.00
CFD20U2	2700K	20W	15.00	\$11.25

*all bulbs listed on this page have Edison E27 base

FREE! LCD Remote Control SSW-R1-12

12 VDC Bulbs

Compact Fluorescent Bulbs*

Part #	Colour	Power	Price (\$)	
CFD15S2	2700K	15W	12.00	\$9.00
CFD15S4	4200K	15W	12.00	\$9.00
CFD15S6	6400K	15W	12.00	\$9.00
CFD20S2	$2700 \mathrm{K}$	20W	15.00	\$11.25
CFD20S4	4200K	20W	15.00	\$11.25
CFD20S6	6400K	20W	15.00	\$11.25
CFD25S2	2700K	25W	15.00	\$11.25
CFD25S4	4200K	25W	15.00	\$11.25

Compact Fluorescents: Spiral Type

Compact Fluorescents: Bulb Type

Part #	Colour	Power	Price (\$)	
CFD3B2	2700K	3W	12.00	\$9.00
CFD3B4	4200K	3W	12.09	\$9.00
CFD3B6	6400K	3W	12.00	\$9.00
CFD5B2	2700K	5W	12.09	\$9.00
CFD5B6	6400K	$5\mathrm{W}$	12.00	\$9.00
CFD9B2	2700K	9W	13.00	\$9.75
CFD9B4	4200K	9W	13.90	\$9.75
CFD9B6	6400K	9W	13.00	\$9.75

*all bulbs listed on this page have Edison E27 base

Inverters

Part #: I-MSINE300 Voltage: 12 V DC Wattage: 300W Pure Sine Wave

Price: \$310.00

Part #: PST-15S Voltage: 12/24 V DC Output: 150 Watts

Price: 12V \$180.86 24V \$196.61

Part #: PST-30S Voltage: 12/24 V DC Output: 300 Watts

Price: 12V \$219.00 24V \$235.00

Part #: PST-60S Voltage: 12/24 V DC Output: 600 Watts

Price: 12V \$351.75 24V \$378.00









Inverter/Chargers

Part #: FX2012T Voltage: 12 V DC Power Rating: 2000VA

Price: \$2500.00

Part #: FX2524T Voltage: 24 V DC Power Rating: 2500VA

Price: \$2500.00

Part #: FX2548 Voltage: 48 V DC Power Rating: 2500VA

Price: \$2500.00

Part #: FX3048T Voltage: 48 V DC Power Rating: 3000VA

Price: \$2500.00

Part #: FX3524 Voltage: 24 V DC Power Rating: 3500VA

Price: \$2500.00











12 V DC Bulbs

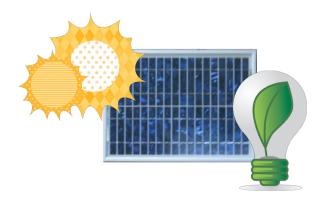
Compact Fluorescent Bulbs

Bayonet Base Compact Fluorescents

Part #	Colour	Power	Base	Price (\$)	
CFDB5U6	$6500 \mathrm{K}$	5W	Bayonet	10.00	\$7.50

B-22 Base Compact Fluorescents

Part #	Colour	Power	Base	Price (\$)	
CFDB2-11U2	$2700 \mathrm{K}$	11W	B-22	5.50	\$4.13
CFDB2-11U6	6400K	11W	B-22	5.50	\$4.13
CFDB2-15U6	6400K	15W	B-22	12.00	\$9.00



24 V DC Bulbs

	Part #	Colour	Power	Base	Price (\$)	
	CF2D11U4	4200 K	11W	Edison	11.00	\$8.25
And Party States	CF2D11U6	$6500~{ m K}$	11W	Edison	11.00	\$8.25
	CF2D20U2	2700 K	20W	Edison	1 5.00	\$11.25
CF2D11U4	CF2D20U6	6400 K	20W	Edison	15.00	\$11.25

24 V DC Compact Fluorescent: **U** Type

Compact Fluorescent:	
U Type (240 V AC)	

Part #	Colour	Power	Base	Price (\$)	
CF2A9U6	6400K	9W	Edison	7.50	\$5.63
CF2A15U6	6400K	15W	Edison	7.50	\$5.63
CF2A20U6	6400K	20W	Edison	7.50	\$5.63

Compact Fluorescent: Spiral Type (120 V AC)



CF1A 7S2

Part #	Colour	Power	Base	Price (\$)	CF1A-
CF1A 7S2	$2700 \mathrm{K}$	7W	Edison	-4.00	\$3.00
CF1A13S2	2700K	13W	Edison	-4.00	\$3.00

Additional bulb types, wattages, and voltages are available by special order.

Solar Charge Controllers

Part #: Sunsaver Series Voltage: 12/24 V DC

Prices:

6 Amp \$60.00 w.LVD \$70.00 10 Amp \$75.00 w.LVD \$80.00 24V

Part #: Prostar Series Voltage: 12 V

Prices: 15 Amp \$145.00 w. remote \$230.00

Part #: Tristar Series Voltage: 12/24 V

Prices: 45 Amp \$252.00 MPPT \$550.00

Part #: FM-60 MPPT Voltage: 12/24 V Output: 60 Amp

Price: \$725.00

Part #: FM-80 MPPT Voltage: 12/24 V Output: 80 Amp

Price: \$859.85











CF1A-13S2 \$3.00

Solar Charge Controllers

Part #: PR Series Voltage: 12/24 V DC

Prices: 10 Amp \$150.00 20 Amp \$210.00

Part #: Solsum Series Voltage: 12/24 V

Prices: 6 Amp \$35.00

Part #: Sunlight Series Voltage: 12 V

Prices: 10 Amp \$145.00

Part #: SCC-30AB Voltage: 12/24 V Output: 30 Amp

Price: \$190.60

Part #: MPPT-2010 Voltage: 12/24 V Output: 10 Amp Input: 20 Amp

Price: \$420.00











12 V DC Light Fixtures

LED Light Fixtures

Part #: SXD-155W-180D-IP65 Colour: Cool white Wattage: 9 LEDs: 180 Dimensions: 6 x 2.5 in

Price: \$25.00

Part #: SXD-110-48D Colour: Cool white Wattage: 2.4 LEDs: 48 Dimensions: 5.5 x 2 in

Price: \$15.00

Part #: SC-205-88D Colour: Warm/Cool white Wattage: 8 LEDs: 88 Dimensions: 8 x 8 x 1.5 in

Price: \$25.00

Part #: SIR-180-39D-Sensor Colour: Cool white Wattage: 3.5 LEDs: 39 Dimensions: 7 x 1.5 in

Price: \$25.00

Part #: SWL-3x1W-A Colour: Cool white Wattage: 3 LEDs: 3 x 1W LEDs Dimensions: 1 x 3 x 15 in

Price: \$20.00











Page 26

12 V DC Light Fixtures

1/2Linear Fluorescent FixturesPrice!and Tubes

Fluorescent light is produced when the phosphor coatings in a tube convert ultraviolet light into visible light after a gas discharge is created in the tube. Fluorescents provide diffused light which, together with their high energy efficiency, makes them ideal for lighting large, open areas. Small fluorescent lights like those shown below are an efficient way to provide lighting for almost any application.

Part#: TF-08	Fixture with one 8W linear tube Color: Warm or Cool White
(b.m. a)	Power: 8W Price: \$16.00 \$8.00
Part#: T8-W/T8-C	Replacement bulb Color: Warm or Cool White Power: 8W Price: \$12.00 \$6.00
Part#: TF 191	8W tube and fixture with on/off switch Color: Cool White Power: 8W Price: \$30.00 \$15.00

LED Fluorescent Replacement Tube

Part #: LED-T8-1200

Tired of high electricity bills and frequent replacements of fluorescent tubes in your home or office? With an average life of 50 000 hrs, and a power consumption of only 18W, the *LED-T8 1200* mm replacement tube is the simple answer. Available in cool white or warm white. MET approved for use in most of North America. Powered by regular household AC, the LED-T8-1200 does not require a ballast for operation, and is simple to install.

Price: \$80.00 ea



	Customer Information			
Name				
Date				
Address				
Phone				
Email	Would you like to receive Glenergy email updates? Y / N			
Location Description				
System Estimate	e should be based on			
□ Summer so	lar hours (~35hrs/week)			
□ Winter sola	ar hours (~12hrs/week)			
□ Year round	usage (~12 hrs week)			
	Additional Notes			
	System Overview			
Solar Capacity (N)			
	Solar size = (Wh/wk x 1.5) / (hrs of sunshine/wk)			
Battery Capacity	/ (Ah)			
	Battery size= (Wh/week) / system voltage			
	Equipment Recommendations			

	Туре	Qty	Unit Price	Total Price
Solar Panel				
Battery				
Controller				
Inverter				
Other				
			Total	

System Estimate Form

		Load Ca	lculati	ion		
ltem	TypicalActualQtyTotal PowerWattageWattage(W)(W)(W)(W)(W)		Usage (Hrs/ Wk)	Total Energy (Wh/Wk)		
Eg. Hair Dryer	1600		1	1600	2	3200
Light Bulb	11					
Television 19"/25"	70/150					
Television 32" LCD	60					
DVD Player	30					
Laptop Computer	50					
Desktop Computer	150					
Clock Radio	10					
Water Pump	750					
Washing Machine	500					
Clothes Dryer	3000					
Refrigerator 16 cu. ft.	725					
Ceiling Fan	125					
Electric Blanket	100					
Coffee Maker	900					
Microwave Oven	1000					
Toaster	1200					
Vacuum Cleaner	1300					
Other						
Other						

Recommended System Voltage Total Energy 0 to 5400 Wh/wk -> 12 V system Total Energy 5400 to 25000 Wh/wk -> 24 V system Total Energy more than 25000 Wh/wk -> 48 V system Total Energy (Wh/ wk)

12 V DC LED Strip Lighting

Rigid Water Proof LED Strip Lighting



Carling and the	Part #	Description	Available Colours	Lumens (lm)	Power	Price (\$)
	RB-W RB-WW RB-B	120 LED Rigid Bar	White Warm White Blue	$255 \\ 240 \\ 150$	9.6 W 9.6 W 9.6 W	$25.00 \\ 25.00 \\ 25.00$
	RM4-W RM4-WW RM4-B RM4-G RM4-R RM4-Y	4 LED Piranha Module	White Warm White Blue Green Red Yellow	$11 \\ 10.5 \\ 4.5 \\ 10 \\ 7 \\ 7 \\ 7$	0.6 W 0.6 W 0.6 W 0.6 W 0.6 W 0.6 W	$\begin{array}{c} 4.00 \\ 4.00 \\ 4.00 \\ 4.00 \\ 4.00 \\ 4.00 \end{array}$
	PB18-W PB18-WW PB18-B	18 LED Piranha Bar	White Warm White Blue	$51\\48\\22$	1.8 W 1.8 W 1.8 W	10.00 10.00 10.00
	PB36-W PB36-WW PB36-R PB36-G PB36-B PB36-Y	36 LED Piranha Bar	White Warm White Red Green Blue Yellow	$ 126 \\ 104 \\ 54 \\ 108 \\ 72 \\ 68 $	3.6 W 3.6 W 3.6 W 3.6 W 3.6 W 3.6 W	$\begin{array}{c} 20.00\\ 20.00\\ 15.00\\ 15.00\\ 15.00\\ 15.00\\ 15.00 \end{array}$
	Extra Connector	Connector on one end and wires on the other	n/a	n/a	n/a	3.00
	Orion W Orion C	Orion 30 LED Strip	Warm White Cool White	130 130	2.2 W 2.2 W	30.00 30.00
	Astro	0.5m mount- ing bracket for Orion LED strip	n/a	n/a	n/a	10.00

12 V DC LED Strip Lighting

Side View Flexible Waterproof LED Strip Lighting

These side view flexible strips are 12V DC and are completely waterproof. Available in a variety of colours, the strips can be cut into lengths as small as 5 cm (3 LEDs) and as large as 500 cm (300 LEDs). These bendable strips are a great solution for all your sign lighting needs.



Part #	LEDs	Available Colours	Colour Temp./ Wave- length	Lumens (lm)/m	Power (Watts)	Strip Width (mm)	Price (\$) /0.5m	
SF-W	60	White	7000K	158	4.8 W	3		
SF-WW	60	Warm	2700K	143	4.8 W	3		
SF-R	60	White	625nm	98	4.8 W	3		
SF-G	60	Red	525nm	148	4.8 W	3	20.00	
SF-B	60	Green	470nm	66	4.8 W	3	S1	5.00
SF-Y	60	Blue	590nm	92	4.8 W	3	φι	<u> </u>
		Yellow						



SF-W

SF-G



SF-B

Charging Options Solar Panels

Specification Part # Price (\$) Voc Vmp Pmax Isc Imp SP-1 21V 65 mA 18 V60mA 1 W 10.00 9 V 1 W 0.11A SP-1A 9.5V $0.12 \mathrm{A}$ 10.00 9 V $2 \mathrm{W}$ 0.22A SP-2A 9.8V 0.23 A 15.0016.5 V3 W 0.185A SP-3 19.2V0.2 A 20.00 9 V $4 \mathrm{W}$ SP-4A 9.8V 0.46 A 0.44A 25.0010 W SP-10 20.9V $0.7 \mathrm{A}$ 17.4 V0.6A 60.00 17.3 V20 WSP-20 21.1V $1.2 \mathrm{A}$ 1.2A 110.00 17.2V2.9A $50 \mathrm{W}$ SP-50 21.6V3.3A 200.00 22.1V8.37A **KD-135GX** 17.7V7.63A 135 W500.00



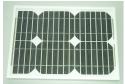




1W Panel

2W Panel

3W Panel



10W Panel







50W Panel

135W Panel

Page 23

Charging Options

Battery Chargers

Quick Charger For NiMH and NiCD, AAA—AA batteries with 4 independent

circuits. AC 120V only!

Part#: QC620 **Price:**



12V DC Battery Charger Part#: BC1-A **Price:** \$22.75 12 V DC charger tailored for AA/AAA/C/D NiMH and NiCD batteries. Includes AC

Optional: AC128+2 page 25 PP50 page 21



Smart AC/DC Charger

adapter.

Part#: SC-320C Price: \$11.00 AC/ DC charger tailored for 2 or



Smart USB Charger USB charger tailored for 2 or 4 pcs AA/AAA NiMH or Ni-Cd

4 pcs AA/AAA NiMH batteries.

Part#: NC-15UC Price: \$13.50



Battery Testers

Tests from A-D, 9V, 1.5V and 6V batteries under actual load Price: \$10.00 conditions

Part#: MW222



Tests AAA, AA, C, D and 9V batteries. Also tests CR123A. CR2, CR-V3, 2CR5, CR-P2 lithium photo batteries, lithium coin cells and most common primary button cells.

Part#: MW333 **Price:** \$15.00



12 V DC LED Strip Lighting

Flexible Adhesive Back LED Strip Lighting

The ultimate in lighting flexibility. This pliable, bendable, LED strip comes equipped with high-power LEDs to provide impressive light coverage in those hard to reach places. An adhesive backing makes mounting a breeze. Curves, corners, round objects, as well as archways or canopies, and almost any place you can imagine can now be lit quite effectively. Can be cut into strips as small as 10 cm (3LEDs) and is available with or without waterproof coating as well as a variety of colours to choose from.

Part #	LEDs Per m	Available Colours	Colour Temp./ Wavelength	Lumens (lm/m)	Power (W/m)	Strip Width (mm)	Price (\$)/m	Price (\$)/m W
STR-12008-CW STR-12008-B	120 120	White Blue	6000-7000K 455-470nm	360-440 120-144	9.6 W 9.6W	8 8	24.00 24.00	n/a n/a
STR-6008-CW STR-6008-WW STR-6008-R STR-6008-G STR-6008-B STR-6008-Y STR-6008-Y	60 60 60 60 60 60 60	White Warm White Red Green Blue Yellow Purple	6000-7000K 3000-3500K 620-630nm 510-520nm 455-470nm 585-595nm 400-435nm	$\begin{array}{c} 180\text{-}220\\ 180\text{-}200\\ 44\text{-}54\\ 76\text{-}96\\ 30\text{-}36\\ 44\text{-}54\\ 30\text{-}50 \end{array}$	4.8 W 4.8 W 4.8 W 4.8 W 4.8 W 4.8 W 4.8 W 4.8 w	8 8 8 8 8 8 8 8	$\begin{array}{c} 16.00\\ 16.00\\ 16.00\\ 16.00\\ 16.00\\ 16.00\\ 16.00\\ 16.00\\ \end{array}$	$\begin{array}{c} 20.00\\ 20.00\\ 20.00\\ 20.00\\ 20.00\\ 20.00\\ 20.00\\ 20.00\end{array}$
STR-3010-CW	30	White	6000-7000K	300-320	7.2 W	10	20.00	24.00
STR-6010-CW	60	White	6000-7000K	620-640	14.4 W	10	30.00	34.00

STRW = Waterproof STR = Non-Waterproof

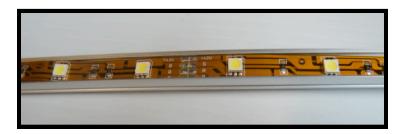


12 V DC LED Strip Lighting

Pre-Mounted Flexible LED Strip Lighting



Part #	Length (cm)	Lens	Price (\$)
STRM30C-3010-CW	30	Clear	15.00
STRM30M-3010-CW	30	Milky	15.00
STRM60C-3010-CW	60	Clear	25.00
STRM60M-3010-CW	60	Milky	25.00
STRM100C-3010-CW	100	Clear	37.00
STRM100M-3010-CW	100	Milky	37.00



Premounted Strip Lighting (Clear)

Charging Options

Rechargeable Batteries

Part #	Cell Size (C-top)	Туре	Capacity (mAh)	Price (\$)
BH-AAA900	AAA	NiMH	900	1.09
BH-AA2600	AA	NiMH	2600	2.40
BH-C4500	С	NiMH	4500	4.50
BH-D8500	D	NiMH	8500	9.00

EnergyON Rechargeable Battery

Features:

- Precharged, ready to use **Cell** :
- Holds 85% capacity after 12 months when used
 High discharge voltage
- Cell size: AA Type: NiMH Capacity: 2000 mAh

Part #: BH-AA2000



- Long life cycle
 - **Replacement Battery Packs**

Price: \$2.15

Part #	Cell Size	Туре	Voltage	Capacity (mAh)	Energy (W·h)	Price (\$)
BPH-25	10 X AA	NiMH	12V	2000	25	15.00
BPH-10	10 X AAA	NiMH	12V	800	10	10.00
BPH-3	3 X AAA	NiMH	3.6V	800	3	2.00



AC Adapters



					T
Part #	Voltage	Amp.	Connector	Polarity	Price (\$)
AC128 +1	12 VDC	800mA	1.3mm	C+	15.00
AC128 +2	12 VDC	800mA	2.1mm	C+	15.00
AC106 -1	10 VDC	600mA	1.3mm	C-	8.00
PS-1-J	12 V DC	1.0 A	2.1mm	C+	15.00
PS-1.2-J	12V DC	1.2 A	2.1mm	C+	22.00
Dc-9	9V DC	500mA	2.1mm	C+	12.00

12 VDC Light Fixtures

Flood Lights

Our exterior 12 V DC LED Flood Lights are the perfect partner for solar or wind powered outdoor lighting systems. They are ideal for lighting signs, paths or for security lighting. In addition, the new FH line offers larger high flux LEDs in a smaller number while providing superior lighting in any application.



FL-10W



FLS-10-CW



FH - 18

FH - 36

Part #	Colour	Power (W)	Lumens	Dimensions (cm)	Price (\$)
FL-10W	Cool white Warm white	10	600	12.5 x 9.6 x 8.7	50.00
FLS-10-CW (Sensor)	Cool white	10	600	12.5 x 9.6 x 8.7	75.00
FH-18	Cool white Warm white Pure white	22	1180	19.5 x 18.5 x 27	180.00
FH-36	Cool white Warm white	47	2000	33 x 18.5 x 29.5	250.00

12 V DC LED Strip Lighting

Mounting Options For Flexible LED Strip Lighting

Part #	Description	Compatible Strips	Price (\$) Per Metre
STR-MNTN-CL	13mm mounting rack with clear lens	8mm/10mm	10.00
STR-MNTN-FR	13mm mounting rack with frosted lens	8mm/10mm	10.00
STR-MNTW-CL	16mm mounting rack with clear lens	10mm only	10.00

LED Strip Light Accessories

This LED dimmer is equipped for wireless dimming of your LED strip lights with a remote control.

Part #: LED Dimmer

Voltage: 12-24 V Amps: 8 A

Price: \$40.00



12 V DC Light Fixtures

Power Supplies For Flexible LED Strip Lighting

AC drivers are of various capacities, and LED strips have varied power consumption per metre, depending upon the models selected. If you want to run LED strips from an AC driver, then the table below will help you determine the appropriate AC driver. The table shows the maximum length of LED strips of different types that can be run from various AC drivers.

Jack Connection Power Supplies

]	LED Power Per Metre				
Part #	AC Driver Capacity (A)	14.4 W/m	9.6 W/m	7.2 W/m	4.8 W/m	Price (\$)	
PS800J	0.8	n/a	1m	1.3m	2m	15.00	
PS-1.5-J	1.5	1.2m	1.8m	2.5m	3.7m	45.00	
PS-2.5-J	2.5	2.m	3.1m	4.1m	6.2m	60.50	

Inline Connection Power Supplies

]	LED Power Per Metre				
Part #	AC Driver Capacity (A)	14.4 W/m	9.6 W/m	7.2 W/m	4.8 W/m	Price (\$)	
PS-2.5-I	2.5	2.m	3.1m	4.1m	6.2m	60.50	
PS-3.4-I	3.4	2.8m	4.2m	5.6m	8.5m	60.50	
S-60-12	5.0	4.1m	6.2m	8.3m	12.5m	49.50	
S-320-12	25.0	20m	31m	41m	62m	145.00	

12 VDC Light Fixtures

Custom Sign Lighting

The Glenergy team offers custom sign lighting using combinations of LED strips, flood lights, compact fluorescents and halogens. Contact a Glenergy sales representative to discuss your sign lighting needs today!



