



Continuous, Reliable and Affordable Solar Solutions



PRODUCT CATALOGUE 2015

Solar Modules

To be able to guarantee top quality and long-term investment returns despite harshest weather conditions, we offer exclusively first-class brand name products of leading manufacturers. These are solar modules of the latest generation - suitable for photovoltaic systems of any size. Ideal for battery charging applications and in stand-alone systems such as rural electrification, lighting, telecommunications, water pumping etc.

Our solar modules range from 12 Watts to 170 Watts and yield higher current output by 10-17% at operating battery voltage.

SWISSWATTS
SUNTECH
PHOTON
POWER BLESSED
UBBINK
BP SOLAR FRANCE



Inverters

Electrowatts Ltd sells off-grid and grid-tie inverters for any application whether it's for your home, business or boat. We offer true sinewave and modified sinewave inverters.

Our inverters have revolutionized the way we live with independent mobile power system, providing silent AC electricity anytime, anywhere. An inverter transforms the DC electricity stored in batteries into standard household AC power. With an inverter from Electrowatts, you don't have to rely on hard-to-find DC-powered appliances or a noisy generator to enjoy the comforts of home in your vehicle, RV or boat.

Our inverters are efficient and reliable devices that come in a variety of sizes and power ranges to meet just about any power need. We offer portable models designed for light AC loads such as small television sets and high powered hardwire units that provide electricity for larger vehicles and boats.

Inverters range from 150VA to 10kVA.

VICTRON
STUDDER INNOTEK
XANTEX USA
OUTBACK-USA



Victron Phoenix Inverter



Studder Innotek Inverters

Batteries

Electrowatts supplies and installs batteries in Kenya and Eastern Africa. Batteries are an essential part of renewable energy systems like solar, wind and backup systems because they enable you to store energy and use it when it is not being produced by the system.

Features:

- Easily configured for battery banks of higher capacity or voltage
- Sealed, non-spill VRLA design
- Heavy-duty lead calcium grid grids
- Its service life is 10-12 years
- Maintenance free (no need to add water)
- Wide temperature range of operation
- Durable high grade ABS plastic case with built in lifting handles
- Uses the latest recombinant technology, virtually eliminating batteries gassing in normal operations

The batteries can be used singular for small 12-volt systems or in multiples for higher voltage/capacity banks. Battery sizes range from 100Ah to 2000Ah.

Stackable, powder-coated, steel battery enclosures are also available to house your batteries.

GASTON

FULMEN
SUNLIGHT
CEIL



Gaston Battery



Fulmen Battery

Charge Controllers

Our charge controllers come in all shapes, sizes, features and price ranges. They range from the 5 amps up to 60amps. Whether the power source is solar, wind, hydro, fuel or utility grid, its purpose is to keep your batteries properly charged and safe for the long run.

In a solar energy system, the controller regulates the voltage and current coming from the solar panels going to battery. Its basic function is to block reverse current and prevent battery overcharge. Some control also prevents battery over discharge, electrical overloads and or display battery status and the flow of power.

PHOCOS
MORNING STAR
XANTREX USA
OUTBACK-USA



Xantrex (Trace) Charge Controllers (60A)



Outback Charge Controller

Solar Water Heaters

Solar water heaters, also called solar domestic hot water systems, can be a cost-effective way to generate hot water for your home. They can be used in any climate, and the fuel they use, sunshine, is free. Using the sun to heat water is efficient, saves money, and reduces pollution.

Sunlight is absorbed by one or more solar collectors, which transfer the absorbed solar heat to water circulated through the collector(s). The heated water is then stored for use throughout the day and night in a hot water storage tank that is highly insulated for it not to lose heat.

We offer the following types of solar water heaters:

1. Active (forced circulation) systems that use pumps to circulate the water, and
2. Passive (thermo siphon) systems that rely on natural convection for water circulation.

Both types of systems include solar thermal collectors and storage tanks. The collectors can range in size from 3 ft. x 7 ft. up to 4 ft. x 12 ft. and are often used in groups.

Our solar water heaters range from 150L to 500L although the tanks may be plumbed together to increase the storage capacity to suit customer requirements.



Solar Water Pumps

Our solar water pumping system is capable of running all types of electrical water pumps with applications varying from irrigation to household demands. Irrigation pumps such as submersible, surface or deep well can also be coupled with drip irrigation systems to enhance the returns from this configuration.

Features:

- ▶ Free power from the sun
- ▶ Pumps up to 130,000 Liters/Day
- ▶ 100% plug and socket assembly
- ▶ So simple to install and you will never have to worry about water level again.

- ▶ Wide range to choose from.
- ▶ No More Fuel Bills
- ▶ Rotor/stator simplicity
- ▶ Little maintenance required
- ▶ One time investment, no running cost
- ▶ Our pumping systems allow for convenient expansion or relocation. If a pump is large enough to accept additional power, PV modules can be added later to increase water output for seasonal operation.



Solar Street Lights/Security Lights

Electrowatts Ltd solar powered street lights use LED lamps that consume 20 to 150 W with a better luminous intensity than traditional halogen lamps which consume ten times more power.

The street lighting systems are designed for a wide range of physical and operating environments and are perfect for rural, suburban and metropolitan areas.

Solar Street lights can enable county governments significantly reduce their electricity bills as well as reduce cost of wiring of new street lights over long distances. Institutions with bays and ware houses that need all night flood lighting can significantly reduce their electricity costs by installing solar powered flood lights and streetlight hence increasing their profits. We do a complete energy audit and recommend the best solutions to implement including using energy efficient appliances.

Common uses for our lighting systems are:

- Roadway: collector, arterial and highway lighting
- Parking lots: open and covered parking lot lighting
- Pathways/trails: emergency phones and lights Tennis courts and running track lighting
- Perimeter fence lighting
- Security lighting and surveillance cameras in construction sites and high-risk or dark areas
- Hazard warning lights at stop signs, cross-walks and on met-towers
- Remote bathrooms and rest stops
- Permanent and Temporary - Government and Military Applications



Wind Generators

Electricity produced by wind generators can be used directly, as in water pumping applications, or it can be stored in batteries for later use. Wind generators can be used alone, or they may be used as part of a hybrid system, in which their output is combined with that of solar panels, and /or a fossil fuel generator. Hybrid systems are especially useful for winter backup of home systems where cloudy weather and windy conditions occur simultaneously.

If you have wind, it is the most economical renewable energy resource available! If you are not sure which wind turbine to choose or need application assistance, please **give us a call**.



Air Breeze Turbine



Air X Marine Turbine

Solar Powered Fridges & Freezers

Save on system costs with SunDanzer battery-powered solar refrigerators and freezers. These highly efficient units with exceptionally low energy consumption require a smaller photovoltaic (PV) system for your refrigeration needs. A patented low-frost system reduces frost build-up for low maintenance.

SunDanzer chest-style refrigerators and freezers are easy to clean using the drain hole at the bottom of the unit. With thick insulation and a refrigeration system optimized for solar, SunDanzer refrigerators and freezers provide outstanding economical and reliable operation. SunDanzer cabinets are commercially produced by one of the world's leading appliance manufacturers.



Household Refrigerator



Commercial Refrigerator

CONTACT US:

To know more about our solar systems or to buy, please contact us:

Electrowatts Center, Butere Road, Industrial Area, Nairobi, Kenya

Tel: +254 20 550 123, +254 20 545 648/9

Mobile: +254 728 817 629, +254 722 520 592, +254 722 722 770

Email: info@electrowatts.co.ke

pmbari@africaonline.co.ke