



**ELSONIC SOLAR LIGHTING & CONTROL MODULES- Build excellent Lanterns, Street Lamps and Solar Lighting Systems for homes, offices, factories with total assistance from Elsonic Group with “Elsonic Inside!”**

Modules that anyone can fit in suitable cabinets (enclosures) along with lamps, batteries, and miscellaneous small accessories and sell them at competitive prices.

Two advanced totally solid-state 12 volt DC modules that comprise the whole inventory. The same modules can be used for all models. High reliability is assured with modern semiconductor devices and no electro-mechanical relays that otherwise add an element of unreliability.

- **High Frequency Inverter Module** to light up 7 watt to 40 watt CFL lamps with superior design and optimization offering 30% higher efficiency than that obtainable at normal mains operating voltages and frequencies. The modules can also be used to light up fluorescent lamps in 12 Volt DC Voltage battery strings, for multiple solar lighting facilities in large premises.
- **Controller & Charger Module** offering utility-mains supply input from 16 Volt AC output transformer. Utility mains charger comprising of thyristor-triggered pulsed output for greater charge efficiency and finer charge control. Also provided with Solar charger regulator with easy connection to solar panels of 5 Watt to 80 Watt. (Depending on how fast charging is desired). The control module has a discriminator to make solar the first choice when utility-mains supply and solar energy are both present. Designed with precise upper cut-off to prevent overcharge and lower cut-off to prevent excess discharge of battery. Also provided with dawn to dusk solid-state switch so that when a light dependent resistor (LDR) is connected, the lamp will turn on only at night. If for any reason the lamp is required during the day, the sensor may be covered with a small piece of black insulation tape to over-ride this function.

These modules use patented designs with advanced devices and concepts that help win market share easily. The regulator-control module can be used as a stand-alone circuit to charge a 12 volt battery with a solar panel or through mains utility-electricity supply while powering LED lamps. Combined with the inverter module CFL or Fluorescent lamps can be powered. This makes production and inventory management easy because one needs to keep only two types of electronic modules and yet have a whole range of products on offer!