

**GEO-Technik** 

-Solar Lamps-



**GEO-Technik** 

## **About GEO-Technik**

- Manufacturer and exporter of professional lighting since 1978
- First goal of the company was development, trade and repair of sound, lighting and other electronics.
- In 1999 the company moved to Kahl /Bavaria in Germany.
- Reorganisation: GEO-Technik specialized in lighting systems for TV-studios, theatres, industrial lightings, outdoor and street lights.
- Since a few years GEO-Technik has a new department for solar lighting production and development.











## **GEO-Technik**

- Own desiged solar lamps
- Manufactured in Germany
- Productions to customer's specification
- High quality standards
- Regulary product tests
- Product trainings for our clients

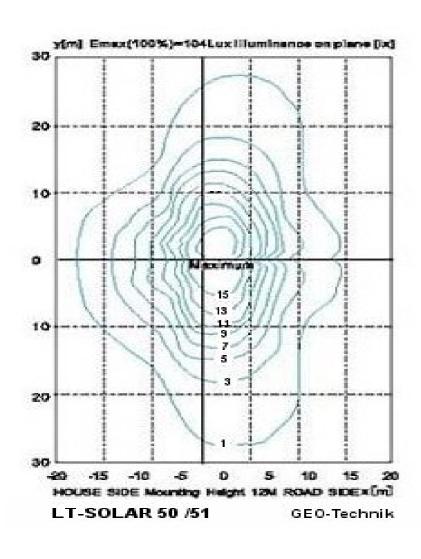


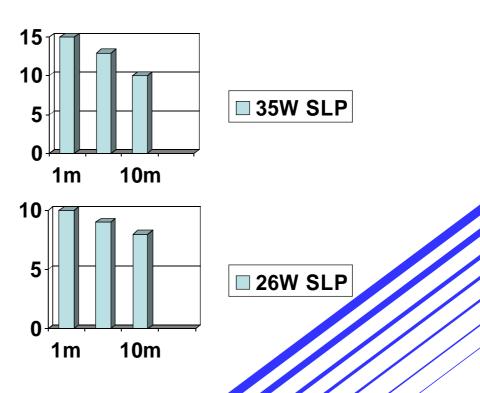
## Solar051

- GEO.Technik Germany
- -Available with high efficient sodium low pressure lamp, high pressure lamp or LED.
- -Efficient longlife, monocrystalline solarpanels.
- -Different pole heights
- -External battery case
- -Processor controlled battery loading and lightmanagement
- -Programmable light periods
- -Electronic ballast



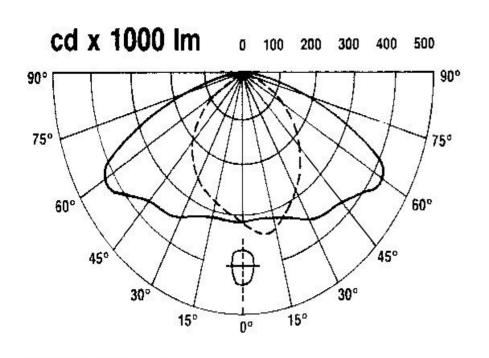
# Brightness of SOLAR051 35 watt in lux and meter distance, at 10m pole height







## Pure Aluminium Reflector



Because of using a coated pure aluminium reflector, SOLAR051 has a very large indicated lighting field and a high light output.

LT-SOLAR50 / 51

**GEO-Technik** 



# The difference between GEO-Technik solar lamps and other solar lamps

-Programmable Solar Charge

**Controller** 

-Electronic ballast



Programmable Solar Charge Controller



The CX controller is a state-of-the art device which has been developed according to the latest available technical standards.



# Programmable Solar Charge Controller



#### **Features:**

- -Multifunctional LC display
- -Programmable Low Voltage Disconnect with new ALVD (Adaptive Low Voltage Disconnect)
- -Sophisticated programmable nightlight function
- -Excess Energy Management (EEM) for a better utilization of your solar system
- -Complete electronic protection



# Programmable Solar Charge Controller



#### **Functions:**

- The charge controller protects the battery from being overcharged by the solar array and from beeing discharged by the loads. The charging characteristics include several stages which includes automatic adaption to the ambient temperature.



# Programmable Solar Charge Controller

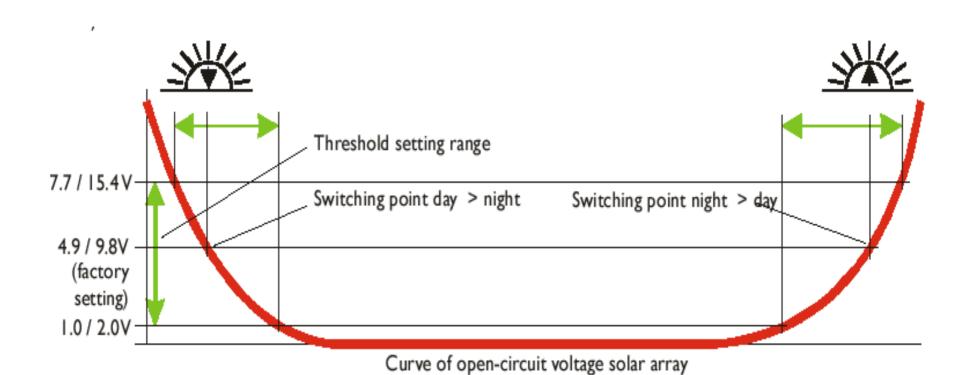


#### **Functions:**

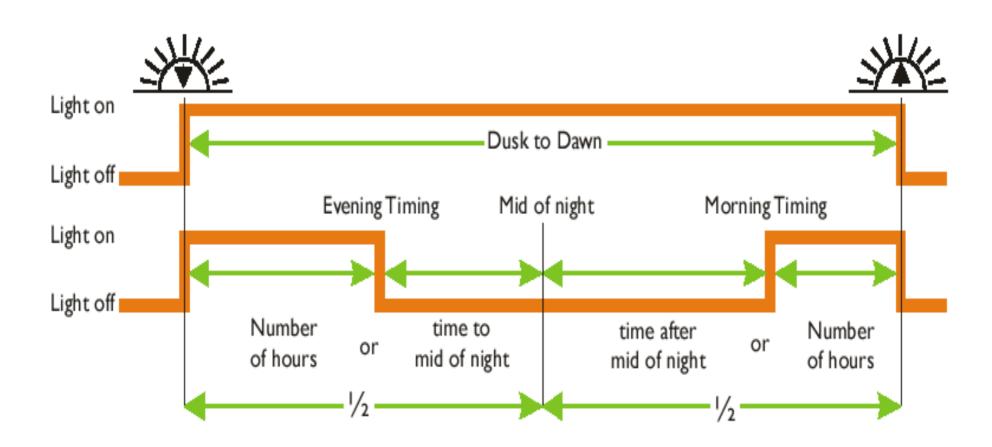
- The charge controller adjusts itself automatically to 12V or 24V system voltage.
- The push button allows switching the load on and off.
- The charge controller can be programmed for different lighting applications.



# Dawn and dusk switching



## Timer control



### Conventional LPS operation

#### **Battery**



12V

#### 230V Inverter with cooling



**Magnetic Ballast** 



230V

**Ignitor** 



Lamp





# LPS operation by GEO-Technik

#### Direct HF supply:

- extreme low loss
- higher lamp brightness 8%
- extended lamp life 10%



#### **Battery**



24V

**electronic ballast** 



Lamp

**GEO-Technik solar lamps need less energy and service than other streetlights by using an electronic ballast.** 

The energy of the battery is directly transformed into the lamp voltage.

Another positive aspect of this is the higher lifespan of the lamp.







GEO TECHNIK