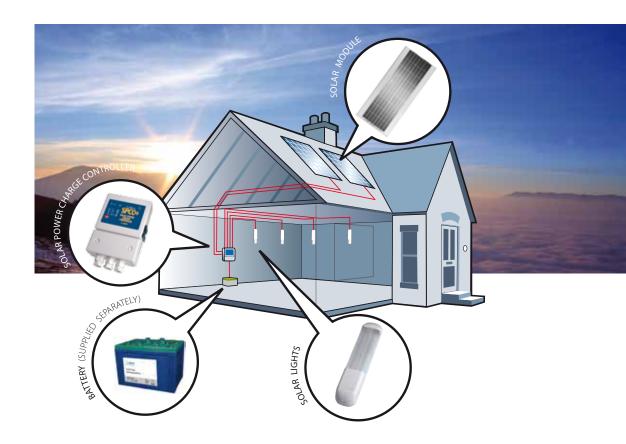


# **Sollatek Solar Lighting Kit**

Self assembly 4 lights solar lighting kit for home/domestic use







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Self assembly 4 lights solar lighting kit for home/domestic use



#### **Features**

- Low cost
- Simple to install
- Fully expandable
- Maintenance-free
- High reliability

### **Applications**

- Homes
- Caravans and chalets
- Remote military outposts
- Beach huts and house boats
- Building sites

A robust fully self contained solar lighting kit, the Sollatek SLK4 provides over 8 hours\* of lighting provided by its four lights. The two solar modules generate electricity during the day which is stored in the battery ready to power the lights.

Central to this kit is the Sollatek SPCC (Solar Power Charge Controller); it manages the charge from the two supplied solar modules and protects the battery from harmful over charge and over discharge, which ensures a long battery lifetime and provides overall system reliability.

The kit is fully expandable. The user can simply add further solar modules, batteries and lights, in order to power up to a maximum total of 150Wp of solar modules, enabling the system to power household appliances such as TV and radio, fans, and others.

Simple to install with step-by step instructions, the system provides a low cost reliable and expandable solar system, suitable for many applications.

\*depending on location

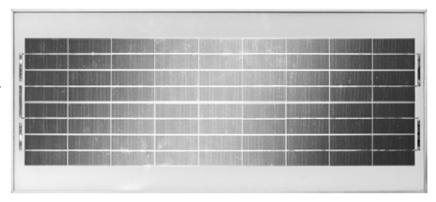
#### **System Components**

#### Solar Modules (SP20-PS)

High efficiency 20watt solar modules, using crystalline technology. Very small, light and durable, can be installed easily on roof surfaces or walls (dependent on the recommended tilt angle).

#### **Features:**

- Complete weather protection
- · Easily mounted
- Protection from damage
- · Crystalline technology
- Repetitive thermal cycling between -40°C and +90°C
- Repetitive cycling between -40°C and +85°C at 85% relative humidity
- Wind loading exceeding 255Km/h
- Impact of 25mm hail at terminal velocity (52mph)
- 25 years efficiency warranty





# ✓ Solar System Controller (SPCC10)

The Sollatek SPCC, with in built lightning protection, controls the solar system's load, thereby protecting the battery from over-discharge and improving its life cycle. Four LED indicators on the SPCC display the system's condition and battery state of charge. Features adjustable voltage limits for trade-off between system capacity and battery life. With additional safety features such as protection against reverse polarity and night time current flow the Sollatek SPCC is the ultimate solution.

### Features:

- 12 Volt
- · Lightning protection
- Reverse polarity protected
- · Battery overload protection
- Reverse discharge prevention
- Low power consumption
- Status indication 4 LED
- Reset switch

#### Lights (Lumina)

The Sollatek Lumina is specifically designed for solar systems. This light fitting utilises the PL type compact fluorescent tube, which together with the light inverter, ensures a tube life of 8,000 to 10,000 working hours under normal conditions. The SLK4 kit includes four Lumina light fittings and four 9watt fluorescent tubes each giving the light output equivalent to a 60watt light bulb. The Lumina has a switch that enables lights to be turned on/off individually. Simple wall/ceiling mounting.

#### Features:

- High efficiency compact fluorescent lamp (4pin)
- 12 DC input
- Low current
- Integral switch
- Supplied with 9w lamp, will operate 7, 9 or 11watt lamps
- · Attractive design



### **Battery Selection**

The SKL4 is not supplied with a battery and so this will need to be purchased separately. It must be a 12V, lead-acid type.

It is recommended that you use a good quality deep discharge solar battery of between 36Ahr to 90Ahr (amp per hour). If a solar battery is not available, then a recreation battery could be used but you should choose one of approximately twice the Ahr rating. If no better alternatives are available, then a vehicle/truck battery could be used but it should be 4 times the recommended Ahr rating, ie a minimum of 150Ahr, otherwise battery life and system performance will be reduced.

A 'sealed' valve regulated battery is a good option. Gel and AGM types are also good. If, however, a flooded type is used, then regular topping up with de-ionised water (available from auto suppliers) will be necessary.

Recommended Sollatek batteries are: i) SFGM36-12, 12V, VRLA, 36Ahr ii) SFGM48-12, 12V, VRLA, 48Ahr iii) SFGM57-12, 12V, VRLA, 57Ahr For more information on batteries log on to www.sollatek.com

A larger 12V battery can be used to give longer running time provided there is enough sunlight available during the day to charge it.

# **Specifications**

Lamp wattage	9W		
Nominal voltage	12VDC		
Current consumption	0.6A		
Tube type	fluorescent		
Tube lumen output	600		
Light colour	white		
Temperature range	-10 to +50°C		
Switch	push switch		
Weight	0.3Kg		
Dimensions (w x h x d)	80 x 350 x 50mm		
SPCC10 Solar system controller			
Solar current	10A		
Load current	10A		
Nominal voltage	12v		
System status	x4 LEDs		
Temperature range	0 to 70°C		
Dimensions (w x h x d)	230 x 135 x 55 mm		
Solar Module SP20-PS (2 units inclu	ded)		
Typical power to peak power (Pm)	20Wp		
Nominal battery to rated voltage (Vm)	12V		
Optimum operating voltage			
to open circuit voltage (Voc)	17V		
Temperature range	-40 to +85°C		
Weight	2.5Kg		
Frame dimensions (w x h x d)	678 x 308 x 18mm		

# Lamp run time

	East	West	North	South	Central	Southern
	Africa	Africa	Africa	Africa	Europe	Europe
Number of Luminas						
	18-29	25-30	25-30	27-30	8-22	13-22
"	hours	hours	hours	hours	hours	hours
Ň	9-15	12-16	12-16	13-16	4-11	7-11
	hours	hours	hours	hours	hours	hours
	6-9	8-10	8-10	9-10	3-8	5-7
	hours	hours	hours	hours	hours	hours

These figures show a range from worst month in year for sunshine and best month. For example in West Africa you can expect to run 4 Luminas for up to 8 hours in summer and 6 hours in winter months.

These figures assume the battery is in good condition and the installation has been carried out correctly.

It also assumes the Solar module installation and tilt angle is correct and is exposed to sunshine most of the day without any obstacles.

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