

## Solar Street Lights

### SOLLATEK SOLAR STREET LIGHTS

The Sollatek range of area and street lighting systems are completely self contained, requiring no electricity line extensions and are maintenance-free, making them ideal for locations where utility power is unavailable or uneconomic.

#### Applications:

Lighting of streets, markets, squares, car parks, bus stops, rural roads, roundabouts, crossings, footpaths, camp sites, beaches, service stations and many more applications.

#### Features:

- No utility line extensions
- No utility bills
- Fast and simple installation
- Location flexibility
- Maintenance -free
- Automatic operation
- High reliability and long lifetime

#### General:

The systems generate their own electricity from the solar modules during the day, which is stored in deep cycle maintenance-free batteries for night time use. Intelligent electronics sense nightfall and automatically activate the lamp which, via a user settable timer, can operate either for a pre-set number of hours, or until dawn. An internal charge controller protects the battery against over charge and over discharge.

Sollatek's 'SL' systems utilise either compact fluorescent lamps (white light) or high efficiency SOX-E lamps (yellow light). These types of lamps together with Sollatek's light inverters ensure very long lamp lifetimes and reliable operation even in the harshest of conditions.

All materials used in the SL systems construction are completely protected against corrosion and are vandal and theft resistant.

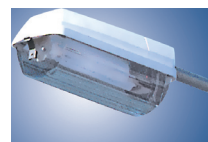
Installation of the SL system is very simple and very flexible, with the battery located underground. For specific projects, modified versions of the SL systems can be provided.



# Solar Street Lights

## SL Series outdoor lighting

| Model        | SL18PL-75                                       | SL18SX-75  | SL26SX-75   | SL26SX-120  |
|--------------|---|------------|-------------|-------------|
| Solar module | : 1x75 Wp                                       | 1x75 Wp    | 1x75 Wp     | 1x120 Wp    |
| Lamp power   | : 18 watts                                      | 18 watts   | 26 watts    | 26 watts    |
| Lamp type    | : PL  | SOX-E      | SOX-E       | SOX-E       |
| Colour       | : white   | yellow     | yellow      | yellow      |
| Lumens       | : 1200  | 1800       | 3700        | 3700        |
| Battery      | : 1x12V 65Ah                                    | 1x12V 65Ah | 1x12V 100Ah | 1x12V 100Ah |
| Autonomy *   | : 2 days  | 2 days     | 2.5 days    | 2.5 days    |
| Pole         | : 4 meter pole above ground and 0.8m foundation |            |             |             |



\*50% DoD, 10 hour operation/day

### The standard SL systems comprise the following components:

- Solar module
- Sealed lead acid battery
- Lamp
- Pole and mountings
- Controller and timer
- Battery box
- Instructions

The standard SL systems will provide a minimum of 2 day autonomy or more depending on the location.

Alternative and custom designed systems can be offered from a very large variety of pole sizes and designs with system configurations and sizing to match required height and required light levels.

Sollatek can provide estimated lighting hours for most locations around the world, and design large alternative systems that will meet your needs.

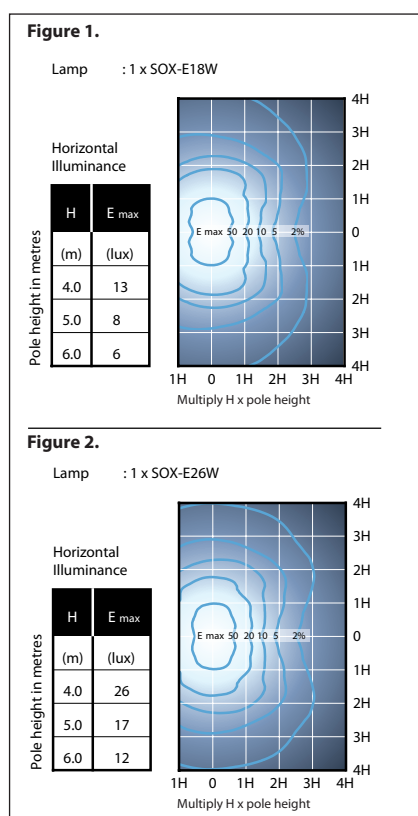
The following diagrams give an indication of amount light (measured in Lux) for a particular lamp (18W or 26W) for a specific pole height.

For example in **figure 1**, a SOX18 lamp at 4 metres pole provides 13Lux below the lamp. 8 meters (2H) away from the lamp, the light intensity is 5% of 13Lux. To the sides of the lamp at 12 metres each side (3H) the intensity is 5%.

**Figure 3** indicates the spacing required between each lamp post and the next.

For example, at 4 metres high, each lamp post should be spaced 16 metres away from each other.

### Relative Isolux diagram



### Positioning the bulkhead

| Mounting height (H) | Spacing (A) | Effective distance from the wall / post illuminated (B) |
|---------------------|-------------|---|
| 3 m                 | 12 m        | 6 m   |
| 3.5 m               | 14 m        | 7m  |
| 4 m                 | 16 m        | 8m  |
| 4.5 m               | 18 m        | 9m  |
| 5 m                 | 20 m        | 10m   |
| 5.5 m               | 18 m        | 9m  |
| 6 m                 | 16 m        | 8m  |

**Figure 3.**

