DMMS

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ELECTRONIC & ELECTRICAL SERVICES

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RELEASING EVOLUTION

SEPS-S6LS-Rev2

(Fully Designed and Manufactured in South Africa)

SYSTEM FEATURES

The SEPS-S6LS-REV2 is a Multi-Purpose Solar Light System specifically designed for Home Security and Emergency Lights in the event of Mains Power Failures. Apart from the security aspect the system is an energy saving system operating independently from the Main Electricity Supply and reduces high electrical bills. The System is user friendly and light functions can easily be selected to suit specific requirements. The range of selections available are:

- Five outlet points with a selection facility to have the lights - two per point - to operate with automatic day/night switching or permanent operation controlled by light switches.

- One outlet point with an emergency facility to have the lights - two per point - to switch on during power failures or to operate with automatic day/night switching and controlled by light switches.

The System comprise of a Battery supplying the energy for LED Technology Light Fittings designed for optimum performance. The Battery is in turn charged by a Hi-Tech Solar Panel and this combination was carefully selected to provide for an average of 14 Hours continuous lighting time store in the event of overcast conditions.

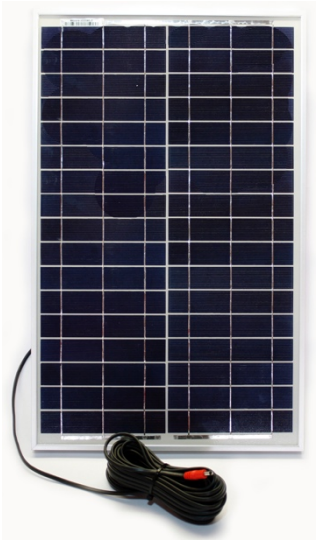
The standard system is supplied with one Control Unit, Four Solar Led Light Fittings Type SEPS-SF2 and two Type SEPS-SLF1, one 50 Watt solar panel complete with 15m input cable and a Battery. Each Light Fitting has its own cable connected to it and sufficient cable and connectors are supplied for inter connecting. Extension can be done up to ten Type SEPS-SF2 and two Type SEPS-SLF1. This will require an additional Battery and PV Panel.

INDIVIDUAL UNIT DESCRIPTIONS

1. **The Solar Control Unit**

The Solar Control Unit is housed in a metal box and is powder coated for durability. It contains only one control module that controls the light system effectively. The individual functions are as follow:

a. **Regulating** - Controls the input supply from the solar panel. Regulates the output supply voltage to the lights. Monitoring and regulating the charging of the battery.
b. **Day/Night control** - It has a build-in Day/Night facility that controls the switching on/off - Dusk to Dawn - of the lights.
c. **Emergency control** - It has the facility to monitor the Main House supply and to switch-on the selected emergency lights for safety in the event of a mains failure. This can be used as normal lights should no mains power be available.
d. **Power Level Indicator Modules** - There are two five LED level indicator modules. One is showing the status of the supply voltage available from the PV Panel and one showing the battery energy available.
e. **Battery Indicator** - When full power is available all five LEDS will light up. As the power is consumed from the Battery the LEDS will switch off from left to right until only one red LED will remain on. At this point the power available is minimal and the unit can then be expected to switch itself off completely to protect the battery (12V 17A/h).
f. **PV Panel Indicator** - When full power from the PV Panel is available all five LEDS will light up. As the sunshine on the panel fades away towards sundown the LEDS will switch off from left to right until all the LEDS are switched off.



2. **The Solar Panel**

The solar panel consist of 36 polycrystalline solar cells and delivers a maximum power of 50Wp, 18V supply and 2.78A maximum power current. The panel weighs 5.2kg with a dimension of 635x670x35mm. The panel is fitted with a standard 15m input cable. Roof mounting brackets are available as an optional depending on the type of roof.

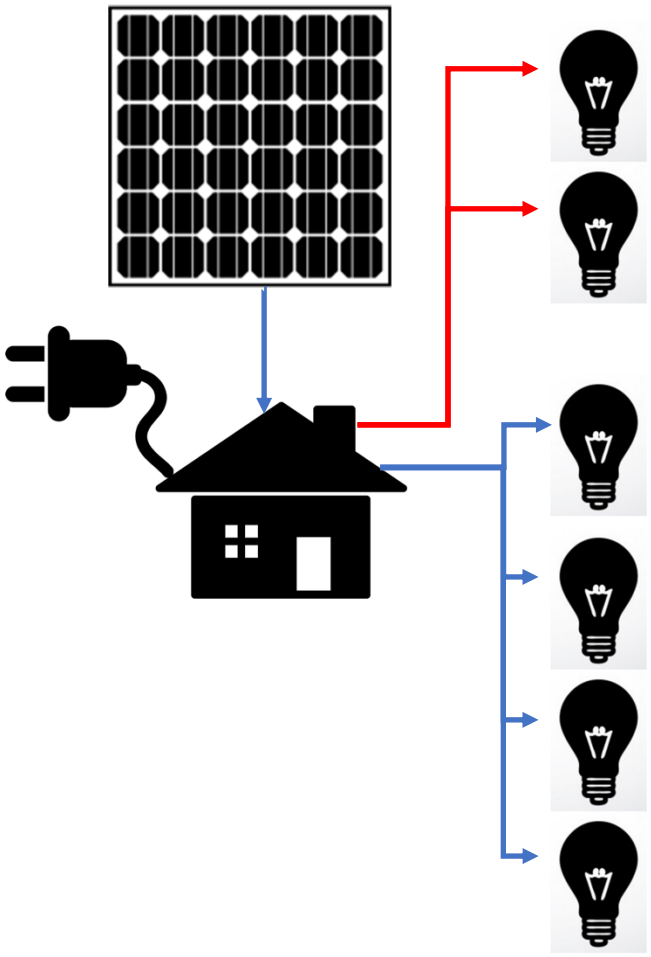
This Hi-Tech solar panel has a 25-year linear performance life span with a 10-year product warranty when used under linear performance conditions.

3. The Solar Light Fittings

The type SEPS-SLF1 solar light fitting used in this system is a small PVC bulkhead with a 4x1W LED strip module producing a light intensity of 640 lumens and a LED luminous efficacy of 10.6 Watt (65W Incandescent). The light fitting is fitted with a chain pull switch for on/off function and a dc mains mini power socket to connect power by means of a 3m input cable with a dc mains mini power plug. This makes installations and setting-up very easy and flexible. Other types of light fittings are also available on request.

The type SEPS-SLF2 solar light fitting used in this system is a small PVC bulkhead with a 4x1W LED strip module producing a light intensity of 640 lumens and a LED luminous efficacy of 10.6 Watt (65W Incandescent). The light fitting is fitted with a fixed 3m input cable.

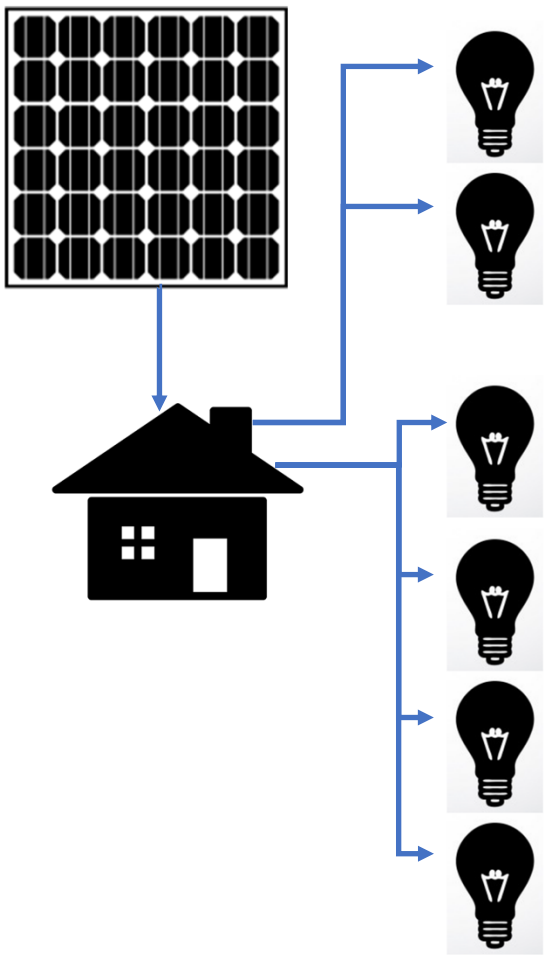
4. Schematic Setup and Specification
Option 1 – Emergency Mode



With option one the mains power is installed and enabled. The system will activate the emergency mode and disable two of the outputs on the system. All the outputs can be set for day/night mode or permanent mode. This means that when the system is set to emergency mode the two ports will not function until the mains power is interrupted. If the system does not detect the mains power it will allow the lights connected to the emergency outputs to go live and allow for the light to switch on.

This is dependent on the mode selected being day/night or permanent mode. If day mode is selected the lights will switch on. If night mode is selected and it is during the day time will the emergency lights not function. They will only switch on once the sun sets. This includes the other four outputs and the option being selected on the output.

Option 2 – Normal Mode



With option two being select all the ports will function based on the mode selected for the outputs. If permanent on mode is selected the lights will remain on and never switch off. If the day/night mode is selected the system will only activate all the ports once the sun sets.

The two LED lights with the pull switches can be set to permanent on and be turned on and off as needed by the user.

Note: all outputs in the home system is equipped with an overload and short circuit protection. The system will only allow for two lights per output to be connected.

5. Service, Repairs and Spares

a. **Service** - DMMS Solutions (Pty) Ltd provides an after sales service on all their designed and manufactured products. Full advisory support is available to clients on any problem they may encounter with any DMMS product they purchase. All they have to do is contact DMMS who are most prepared to assist.
b. **Repairs** - DMMS Solutions (Pty) Ltd has workshop facilities to carry out repairs on all their products purchased by clients.
c. **Spare Parts** - DMMS Solutions (Pty) Ltd stock spare parts on all their products and will on request supply and deliver to any client nationally and internationally.