



# Obstruction Lighting GSM Cell-Phone Monitoring & Alarm System Owner's Manual

**Disclaimer:**

It is the customer's responsibility to check with their service provider (prior to installation) to ensure there is network coverage in the area in which the light(s) will be installed. Avlite Pty Ltd will not be held responsible if the network coverage of the service provider should fail.

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1.0	Manual Launch	July 2006	S. Turner



## Introduction

**Welcome to GSM monitoring of your Avlite light. The Avlite GSM Monitoring and Alarm System is a complete integrated module designed to allow convenient monitoring of Avlite lights using a cellular telephone and web access from remote locations that have GSM network coverage.**

The GSM circuit monitors the data from the light and will report to designated cell phones a number of pre-programmed alarm conditions if they occur.

The GSM System is internally housed within the Avlite light and requires no external aerials – providing convenient installation and retaining the IP68 waterproof rating of the light.

The user can also send an SMS text message to the designated Avlite light to receive a status report from the light by return SMS text message. In addition, the user has complete control over the types of alarms received should a fault occur, as well as an array of remote control options including operational mode and flash code.

The user can also set the light up to regularly report to a secure area of the Avlite website (the Avlite web gateway). This will provide details of your light's operation and its GPS position and includes historical graphed statistics of each light.

All functions can be programmed into the remote light by sending an appropriate SMS text message from a designated cell phone.

Alerting to a potential power disruption has never been easier.

The Avlite GSM Monitoring and Alarm System is secure – unauthorised access to the light's data cannot occur as only the designated cell phone numbers programmed into the light will respond to a remote SMS text message.

Data transferred to, and maintained, on the Avlite website is user password protected.

In order to optimise power consumption, the GSM module wakes up every 3 hours to check for messages and process commands. Alarm conditions will however cause the GSM to wake up immediately and send a message. The GSM module will remain awake for approximately 10 minutes after processing the last message.

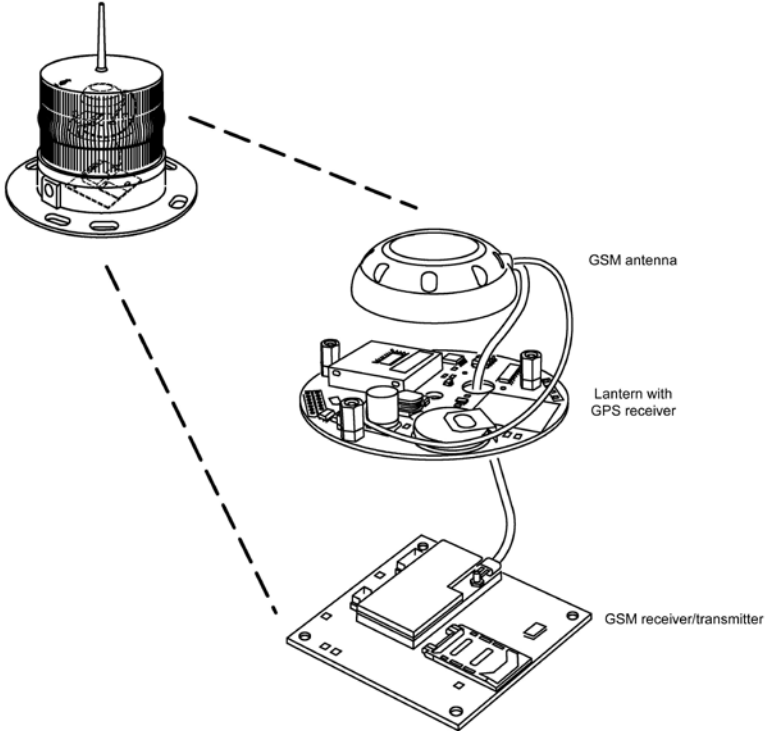
### **Key Features:**

- Access of current light status at any time by sending an SMS text message to the light from any designated cell phone number. The light status is sent by return SMS text message;
- Regular reporting of light status to designated cell phone numbers and/or web server;
- Reports any pre-programmed alarm condition to designated cell phone numbers, and/or email addresses;
- Remote control of light features by sending an SMS text message to the light including flash setting and operation mode;
- Versatile configuration allows light with or without GPS modules fitted to be monitored remotely.

### **Available Data from Remote Light:**

- Battery voltage
- Solar module charging current
- Light current draw
- Light position - Latitude and Longitude (with GPS option)
- Day/night on status
- Current operation mode
- Current flash code setting
- Current intensity setting

**System Components**



**All components of the GSM Receiver / Transmitter are enclosed within the Avlite light body.**



## Getting Started: Setting up your GSM Module

Setup of the Avlite GSM Monitoring and Alarm System is a simple 4-step process, outlined below;

### STEP 1:

**Purchase, Record and Insert  
SIM Card into GSM Light**

- Similar to a cell-phone, a valid SIM card needs to be acquired and inserted into the GSM module prior to use (see “Purchasing a SIM Card” section of this manual). Refer to *Installing the Sim Card* section of this manual for a step-by-step guide to installing your SIM card.

### STEP 2:

**Program Cell Phone Access  
List, Web Reporting and  
Essential Commands**

- The access list is a list of cell phone numbers from which the Avlite GSM Monitoring and Alarm System will accept configuration commands and report requests. Web reporting and essential commands may also be setup at this step.

### STEP 3:

**Program Desired Cell Phone  
Reporting List and Alarms**

- The report list is the list of cell phone numbers which the light may send any SMS text message alarm report to. Alarm emails may also be activated from Avlite’s secure GSM Web Portal.

### STEP 4:

**Accessing the Avlite  
GSM Web Portal**

- By sending a report to the Web gateway and providing access via the Avlite website, historical data and graphs may be viewed on each light.



**GSM Monitoring & Alarm  
System Ready for Operation**

**NOTE:** The Avlite GSM will remain awake for 10 minutes after power on or from the last message sent, but then will enter a 3 hour sleep cycle during which time it will not process commands.



## STEP 1:

### Purchase, Record and Insert SIM Card into GSM Light

#### Purchasing a SIM Card and Recording Details



Ensure the SIM card is unlocked prior to installing into the light.

One SIM card is required per light and can be purchased from your local telecommunications dealer. You may decide to purchase a pre-paid SIM card, or set the SIM card up on a plan (this is similar to purchasing a new cell phone).

Avlite's GSM enabled lights require a Mini-SIM or 2FF SIM Card with a 6 pin contact arrangement.



**RIGHT:**

**Mini-SIM or 2FF SIM Card (2nd Form Factor)  
- 6 pin contact arrangement**



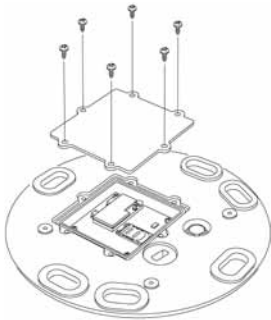
**WRONG:**

**- 8 pin contact arrangement**

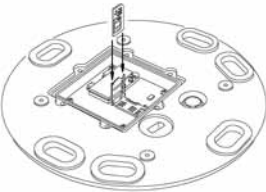
Each light with GSM Monitoring and Alarm System will have an individual cell phone number. This number is unique to the light and should be recorded for reference purposes against the light it is installed in. To assist in recognition it is advisable that a description be included as well as the number (For example, Port Beacon #12, +61400123456). A similar recording in user cell phones will assist in identifying light installations to which SMS text message commands are sent (the same process as adding a new contact in your cell phone address book).



## Installing the Sim Card

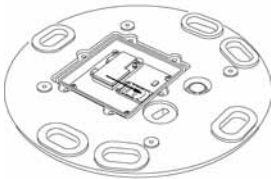


Remove the 6 retaining screws from the cover on the underside of the light, to gain access to the GSM compartment.

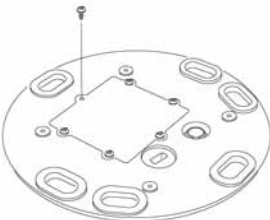


Open the SIM Card holder and insert the SIM into the holder.

- Make sure the SIM Card is positioned correctly.
- Make sure the SIM Card is 'Unlocked' before inserting in the holder (ie. the SIM card password has been disabled).



Fold the SIM Card holder and push it back into the closed position



Replace the 6 retaining screws to close the GSM compartment.

- Make sure the rubber seal is positioned correctly before fitting the cover.



## STEP 2:

### Program Cell Phone Access List, Web Reporting & Essential Commands

The Access List is a list of cell phone numbers from which the Avlite GSM Monitoring and Alarm System will accept configuration commands and report requests. Web reporting and essential commands may also be setup at this step.

Follow the process below to program the Access List, Web Reporting and Essential Commands;

**Select a cell phone from which the GSM Monitoring and Alarm System module will be activated.**

- The light will accept the first cell phone contact for instructions.
- The first instruction must be correct as the light will then only respond to the access cell phone number(s) given.

*Two numbers should be provided to the light to ensure there is a backup access\*\*.*

**Add cell phone numbers to the permitted access list by sending the SMS text message:-**

**add access +(country code)(phone number)**

**More than 1 cell phone number can be included in the SMS text message. To do this separate each cell phone number with a 'comma' character.**

- "+" and the country code (eg. 61 for Australia, or 44 for U.K) are required to establish the country prefix in which the GSM unit is to operate in. Additional cell phone numbers can then be added by sending commands from those numbers given access.
- For example, to add an Australian cell phone number to the access list the SMS text message command would be:  
**add access +61400987654**

**All additional telephone numbers added to the access list must continue to be in international format.**

- Once the number has been added to the access list the Avlite GSM Monitoring and Alarm System will accept commands from these numbers and acknowledge confirmation via reply SMS text message.
- This command initiates the daily web reporting, which sends a daily diagnostic update to be viewed from your secure login at the Avlite Website.

**Enable web reporting by sending the SMS text message:-**

**add autoreport**

Only phone numbers listed in the Access List will be able to "Set" and "Get" light information.

\*\*In the event that the access cell phone number(s) is lost or no longer in service, Avlite can reset the light from the factory if required.

From an authorized Access Cell Phone send a new SMS with text message 'status' or 'report' to the designated SIM card number of your GSM light.

Within a few minutes expect a reply in similar format as the following:

-----  
**Status Report**

**Volts:** 14.1V

**Charge:** 0.33A

**Mode:** Dusk to Dawn

**FCode:** 051

**Night**

**Lat:** 38 13.2988 S (Latitude 38° 13.2988')

**Long:** 145 10.8529 E (Longitude 145° 10.8529')

-----

*Note: The actual layout of the message is dependent on your cell phone screen.*

*Note: Lat/long only shown when GPS option is fitted*

**User Case #1: Setting up the light to report an alarm to a cell phone**

In this example, a cell phone with the phone number +61491570166 is used to enable the alarm function *low battery*. When the alarm condition occurs, the light will alert cell phone +61491570156.





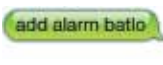
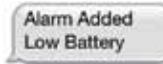
**Note:** it is allowable to assign a different cell phone number to receive the alarm reports.

The following messages will be texted to the light:

add access +61491570166

add report +61491570156

add alarm batlo

	SMS text message to Light	SMS text message received on cell phone	Comment
<b>Step 1</b>			Configures the light to allow commands <b>Note:</b> The cell number must be formatted as: +(country code)(phone number)
<b>Step 2</b>			When an alarm condition occurs, a text message will be sent to phone number. Note it is allowable to assign a different cell phone number to receive the alarm reports.
<b>Step 3</b>			The light will send a text message to all phone numbers in the report list when the battery voltage falls below 10V.

**User Case #2: Setting up the light to report to the Avlite web gateway**

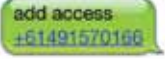





In this example, a cell phone with the phone number +61491570166 will configure the light to send daily reports to the Avlite web gateway.

The following messages will be texted to the light:

add access +61491570166

add web +61416906478

add autoreport web

	SMS text message to Light	SMS text message received on cell phone	Comment
<b>Step 1</b>			Configures the light to allow commands <b>Note:</b> The cell number must be formatted as: +(country code)(phone number)
<b>Step 2</b>			When an alarm condition occurs, a text message will be sent to the Avlite web gateway. This the phone number for Avlite's web gateway.
<b>Step 3</b>			Enables a daily web report to be sent to the Avlite web gateway number

**Notes:**

1. In order to view web reports, please refer to "Accessing the Avlite Web Reports" section of this manual.
2. If the light is located outside of Australia, the light's SIM card will need permission to be send text internationally. Please consult with your SIM card provider to ensure that this feature is enabled.



## STEP 3: Program Desired Cell Phone Report List & Alarms

An alarm is an SMS text message which is sent after a preset alarm condition programmed into the light is triggered. Care should be taken when selecting suitable alarms as they can generate large numbers of SMS text messages if not carefully selected.

The report list establishes the cell phone numbers that the alarms will be sent to.

### Programming Report List

The following process will create a list of approved cell phone numbers from which desired alarm reports will be sent;

**Use a cell phone in the access list to create the report list by sending the SMS text message:-**

**add report +(country code)(phone number)**

**More than 1 cell phone number can be included in the SMS text message. To do this separate each cell phone number with a 'comma' character.**

- This creates an authorised list of cell phone numbers belonging to staff, on-call company maintenance officers or contractors.
- For example, to add an Australian cell phone number to the report list the SMS text message command would be:  
**add report +61400987654**

**A successful update will result in an SMS text message reply:-**

**Report List  
+(designated cell phone numbers)**

**The designated cell phone number has now been added to the 'report' list. The Avlite GMS module will now accept an SMS text message request for status 'report' from this number.**

- The SMS text message 'report' sent from on-call company maintenance officers or contractors in this list will now generate the standard report SMS text message reply from the light.

A typical response SMS text message report message from a light will display as below:

-----  
**Report List**  
**+61400111222**  
-----

*Note: The actual layout of the message is dependent on your cell phone screen.*



### Creating Individual Alarms to be sent to the Cell Phone Report List

Specific alarms can be created and sent as an SMS text message to cell phones listed in the Report List.

The following process will enable desired alarms;

**Use a cell phone in the access list to enable desired alarms by sending the SMS text message:-**

**add alarm (alarm parameter)**

**More than 1 alarm can be included in the SMS text message. To do this separate each alarm parameter with a 'space' character.**

- An example of an actual alarm SMS text message would be:

add alarm batlo

- This sets the low battery alarm. No cell phone number is required following the SMS text message

**A successful update will result in an SMS text message reply:-**

**Alarm Added  
(list of all alarms currently setup)**

- A successful update of the above example would result in a reply SMS text message:

Added Alarm  
Low Battery

A typical response SMS text message report message from a light when alarms are set up will display as below:

-----  
**Alarm Added  
Low Battery  
Web Report**  
-----

*Note: The actual layout of the message is dependent on your cell phone screen.*

Once an alarm condition has occurred/been triggered an SMS text message will be sent reporting the alarm to all cell phone numbers listed in the "Report List" and/or to the email addresses listed in the enabled "Alarm Emailing List" from the Avlite GSM Web Portal. Alarm conditions will continue to be reported once every 24 hours. This is to prevent constant reporting of the same alarm or multiple alarms. The light can still be accessed by requesting a report via SMS text message.

### Alarm Sources Summary

All of the following alarm conditions can be programmed via SMS text message to be either ENABLED or DISABLED.

If an alarm condition that has been enabled occurs, an SMS text message will be automatically sent to all the cell phone numbers listed in the Report List.

Command	Parameter	Function	Enable Command Format	Disable Command Format
add alarm	<b>batlo</b>	Alarm SMS "batlo" is asserted when the battery voltage falls to a low level (flat battery). An alarm condition will be set if the system battery voltage falls below 10.0v indicating a flat battery. The light will be turned OFF if the battery voltage falls below 10.0v.	<b>add alarm batlo</b>	<b>delete alarm batlo</b>
	<b>nodata</b>	Alarm SMS "nodata" is asserted when the GSM module loses communication with the light circuitry.	<b>add alarm nodata</b>	<b>delete alarm nodata</b>
	<b>LED</b>	Alarm SMS "LED fail" is asserted when circuit detects an LED fault. This may mean the LED is not lit	<b>add alarm LED</b>	<b>delete alarm LED</b>
<b>Daily Reporting Alarms</b>				
add alarm / add autoreport	<b>daily</b>	Enables a daily status report from the light to be sent to all cell phone numbers in the report list. This report occurs 4 hours after daybreak each day.	<b>add alarm daily</b> or/ <b>add autoreport status</b>	<b>delete alarm daily</b> or/ <b>delete autoreport daily</b>
	<b>power</b>	Enables a daily battery status report to be sent to all cell phone numbers in the report list. This report occurs 4 hours after daybreak each day.	<b>add alarm power</b> or/ <b>add autoreport battery</b>	<b>delete alarm power</b> or/ <b>delete autoreport battery</b>
	<b>web</b>	Enables a daily web report to be sent to Avlite's GSM Web Portal, web gateway numbers in the web list. This report occurs 4 hours after daybreak each day.	<b>add alarm web</b> or/ <b>add autoreport web</b>	<b>delete alarm web</b> or/ <b>delete autoreport web</b>
<b>ALARMS AVAILABLE FOR GPS ENABLED LIGHTS ONLY</b>				
add alarm	<b>nogps</b>	Alarm SMS "nogps" is asserted when the GPS data is not available - usually due to GPS signal loss.	<b>add alarm nogps</b>	<b>delete alarm nogps</b>



## Accessing Your Light's Data

### A) Via Cell Phone

General data about the light is accessed via simply sending the SMS text message; 'status' or 'report' from an authorized cell phone number (must be listed in the 'access' list or 'report list') to the designated light's SIM card number.

An automatically generated reply SMS text message will then be sent to your cell phone which includes information about the light status.

#### 1. A typical requested SMS text message report from a light will display as below; 'status' or 'report'

-----  
**Status Report**

**Volts:** 14.1V  
**Charge:** 0.33A  
**Mode:** Dusk to Dawn  
**FCode:** 051  
**Night**  
**Lat:** 38 13.2988 S (Latitude 38° 13.2988')  
**Long:** 145 10.8529 E (Longitude 145° 10.8529')

-----  
*Note: The actual layout of the message is dependent on your cell phone screen.  
If the light is not fitted with GPS the message "No GPS Data" will be given in place of the GPS data*

#### 2. Specific battery data from your light is accessed via the SMS text message; 'power' or 'battery'

-----  
**Power Report:**

**Battery:** 14.2V  
**Charge:** 0.24A  
**Load:** 0.02A

**Yesterday**

**Min:** 14.1V  
**Max:** 14.3V  
**Max Solar:** 0.36A  
**Charge:** 1.76Ah  
**Load:** 0.56Ah

-----  
*Note: The actual layout of the message is dependent on your cell phone screen.  
Ah = Ampere Hours = current x time (24 hour running).  
Yesterday's power data is only available if the GSM has been running for more than 24 hours*



**B) Via Avlite GSM Web Portal**

To configure your GSM light to send daily reports or alarms to Avlite's secure online GSM Web Portal the following messages **MUST** be sent via SMS text message to your light:

"add web +61416906478"

Then send the SMS text message:

"add autoreport web"





## The add Command

The “add” command allows;

- Cell phone numbers to be added to the ‘access’ and ‘report’ lists and;
- Required alarms and autoreports to be enabled.

**Only users listed in the Access List are able to use the “add” commands**

***Full cell phone numbers including ‘+’ and country code must be used when adding cell phone numbers to the ‘access’, ‘report’ & ‘web’ lists.***

To add the cell phone number 0402123456 to the ‘report’ list the following command would be sent in an SMS text message from any cell phone number listed in the access list:

**“add report +61402123456”**

A successful update would result in an SMS text message reply:

**“Report List  
+61402123456”**

To add a low battery alarm trigger the following command would be sent in an SMS text message from an authorised cell phone:

**“add alarm batlo”**

A successful update would result in an SMS text message reply:

**“Alarm Added  
Low Battery  
No Lantern Data  
No GPS Data”**

Command	Parameter	Function	Example Command Format
<b>add</b>	<b>access</b>	Adds additional cell phone number(s) to the permitted access list. More than one cell phone number can be included in the SMS by separating each number with a "comma" character. The same cell phone number may also be programmed into the "report" list. The access list can contain a maximum of 16 cell phone numbers.	<p><b>add access</b> <b>+61402123456</b></p> <p style="text-align: center;">or/</p> <p><b>add access</b> <b>+61402123456,</b> <b>+61402654321</b></p>
	<b>report</b>	Adds additional cell phone number(s) to the permitted report list. More than one cell phone number can be included in the SMS by separating each number with a "comma" character. The same cell phone number may also be programmed into the "access" list. The report list can contain a maximum of 16 cell phone numbers.	<p><b>add report</b> <b>+61402123456</b></p> <p style="text-align: center;">or/</p> <p><b>add report</b> <b>+61402123456,</b> <b>+61402654321</b></p>
	<b>alarm / autoreport</b>	Adds the required alarm or autoreport functions that will report to the cell phones in the report list. More than one alarm can be included in the SMS. Separate each alarm condition with a "space" character. Possible alarms are: <b>batlo, nodata, daily, nogps, web, power, LED</b> Possible autoreports are: <b>status, daily, battery, power, web</b>	<p><b>add alarm batlo</b></p> <p style="text-align: center;">or/</p> <p><b>add alarm batlo, nogps</b></p> <p style="text-align: center;">or/</p> <p><b>add autoreport status</b></p>

All cell phone numbers must be presented in international format – ie/ In Australia '0402123456' becomes '+61402123456'. In the United Kingdom, '07791234567' becomes '+447791234567'. The maximum phone number can be 15 digits long, if you require more than 15 digits please contact Avlite.

## The list Command

The “list” command allows the operator to view:

- Cell phone numbers listed in the ‘access’, ‘report’ and ‘web’ lists and;
- List enabled alarms and autoreports programmed into the light.

### Only users listed in the Access List are able to use the “list” commands

To determine the cell phone number entries in the ‘report’ list the following SMS text message command would be sent:

**“list report”**

The GSM Monitoring and Alarm System would SMS text message a response containing the contents of this list:

**“Report List:**

**+61402123456,**

**+61402654321”**

To determine the ‘alarm’ list the following SMS text message command would be sent:

**“list alarm”**

The GSM Monitoring and Alarm System would SMS text message a response containing the contents of this list:

**“current alarm list: no data, temphi, nogps, nopps, batlo”**

Command	Parameter	Function	Example Command Format
<b>list</b>	<b>access</b>	Requests a list of the current cell phone numbers in the access list. An SMS is returned showing the current access list.	<b>list access</b>
	<b>report</b>	Requests a list of the current cell phone numbers in the report list. An SMS is returned showing the current report list.	<b>list report</b>
	<b>web</b>	Requests a list of the current Avlite web gateway phone number. An SMS is returned showing the current report list.	<b>list web</b>
	<b>alarm / autoreport</b>	Requests a list of the current alarms and autoreports programmed into the alarm list. An SMS is returned showing the current alarm list.	<b>list alarm</b> or/ <b>list autoreport</b>

**All telephone numbers must be presented in international format – ie/ In Australia ‘0402123456’ becomes ‘+61402123456’. In the United Kingdom, ‘07791234567’ becomes ‘+447791234567’.**

## The delete Command

The “delete” command operates in the same way as the “add” command. The difference is the “delete” command will also accept the keyword “all”. This allows the list to be cleared in a single SMS text message.

### Only users listed in the Access List are able to use the “delete” commands

To remove the cell phone number 0402123456 from the report list the following command would be sent:

**“delete report +61402123456”**

A successful deletion would result in an SMS text message reply:

**“Report List  
Empty”**

*When the report list is “empty”, this means that there are no cell phone numbers in the ‘report’ list, therefore disabling the automatic alarm function.*

To remove an alarm from the alarm list the following command would be sent:

**“delete alarm batlo”**

A successful deletion would result in an SMS text message reply:

**“Alarm Deleted  
No Lantern Data  
No GPS Data”**

Command	Parameter	Function	Example Command Format
delete	access	Deletes the requested cell phone number from the permitted access list.	<b>delete access +61402123456</b>
	report	Deletes the requested cell phone number from the permitted report list.	<b>delete report +61402123456</b>
	web	Deletes the requested cell phone number from the permitted web list.	<b>delete web +61416906478</b>
	alarm / autoreport	Deletes the requested alarm or autoreport from the current alarm list.	<b>delete alarm batlo</b>

**All telephone numbers must be presented in international format – ie/ In Australia ‘0402123456’ becomes ‘+61402123456’. In the United Kingdom, ‘07791234567’ becomes ‘+447791234567’.**

## The get Command

The “get” command is used to retrieve or “get” information from the light.

Information that can be retrieved includes

- Light Type
- Software Version
- Flash Code
- Intensity
- Operation Mode

**Only users listed in the Access List are able to use the “get” commands**

To retrieve the current flash code setting in the light, the following command would be sent

“Get fc” or “Get Flashcode” or “Get Flash code”

A successful reply would result in an SMS text message reply:

**Lantern Config**

**Mode:** Dusk to Dawn  
**Flash Code:** 000  
**Intensity:** ICAO Type A

*Note: The 51 indicates the flash code as it relates to the sequence found in the Avlite Flash Code Tables*

To retrieve the current intensity setting in the light, the following command would be sent

“Get intensity”

A successful reply would result in an SMS text message reply:

**Lantern Config**

**Mode:** Dusk to Dawn  
**Flash Code:** 000  
**Intensity:** ICAO Type A

**Valid intensity settings:**

- ICAO Type A (10cd)
- ICAO Type B (32cd)
- FAA L810 (32.5cd)

Command	Parameter	Function	Example Command Format
<b>get</b>	<b>Type</b>	Gets the light hardware type	<b>Get type</b>
	<b>Version</b>	Gets the light’s software version	<b>Get version</b>
	<b>Operation Mode</b>	Gets the light’s operational mode	<b>Get Mode Get Op</b>
	<b>Fc Flashcode Flash code</b>	Gets the light’s flash code <i>Note: the light will respond to any of the options shown to the left.</i>	<b>Get fc Get flashcode Get flash code</b>
	<b>Intensity</b>	Gets the Light’s current intensity setting	<b>Get intensity</b>

**All telephone numbers must be presented in international format – ie/ In Australia ‘0402123456’ becomes ‘+61402123456’. In the United Kingdom, ‘07791234567’ becomes ‘+447791234567’.**

## The set Command

The “set” command is used to enter or “set” information on the light.

Information that can be set by the user includes

- Operation Mode
- Flash Code

**Only users listed in the Access List are able to use the “set” commands**

To set a new flash code, the following command would be sent

**“Set fc 83” or “Set Flashcode 83” or “Set Flash Code 83”** (the flash code used was 8,3 (0.3On, 0.7Off)

A successful reply would result in an SMS text message reply:

### Lantern Config

**Mode:** Dusk to Dawn

**Flash Code:** 083

**Intensity:** ICAO Type A

*Note: The 0x indicates the number is in Hexadecimal Format*

*Note: The 51 indicates the flash code as it relates to the sequence found in the Avlite Flash Code Tables*

### The default values for the light are:

- Operation Mode – Dusk to Dawn.
- Flash Code – is factory set to 00 via the Rotary Switches.
- Intensity – is factory set to 100% via the DIP Switches.

Command	Parameter	Function	Example Command Format
set	Mode	Sets the light's operation mode. <ul style="list-style-type: none"> <li>• Dusk to Dawn, on</li> <li>• Standby, off</li> </ul>	Set mode Dusk to Dawn Set mode Standby
	Fc Flashcode Flash code	Sets the light's flash code Note: the light will respond to any of the options shown to the left. The flash code set by this command will remain active until either a new command is received or the Rotary Switches are changed.	Set fc 51 Set flashcode 51 Set flash code 51

**All telephone numbers must be presented in international format – ie/ In Australia ‘0402123456’ becomes ‘+61402123456’. In the United Kingdom, ‘07791234567’ becomes ‘+447791234567’.**

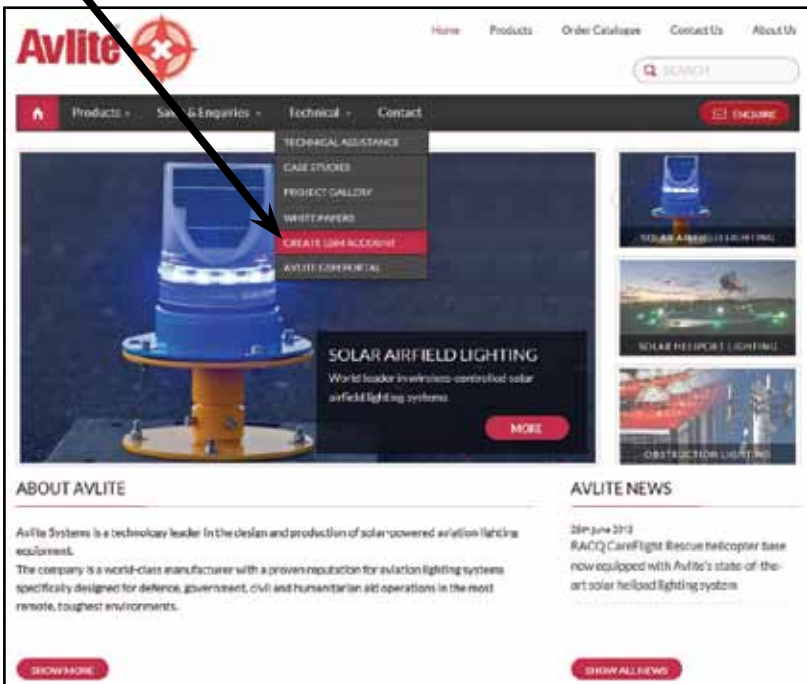
## STEP 4: Accessing the Avlite GSM Web Portal

### CREATE A GSM ACCOUNT

After daily web reporting has been enabled via SMS text message command and your GSM light, access to historical data and graphs about individual light installations is available via the Avlite website.

Follow the steps below to access your light operational data:

1. Go to **www.Avlite.com** on the internet, select the **Technical** tab, then select **CREATE GSM ACCOUNT**.



For light data to be updated daily in the Avlite GSM Web Reports, users must first send the SMS text message command “add alarm web” to the designated light(s).

2. Complete the details on the **GSM System Account Creation** screen including your contact details and valid Avlite GSM Product Serial Number, and click **Submit**

**Avlite** Home Products Order Catalogue Contact Us About Us

Products Sales & Enquiries Technical Contact **enquire**

Home > Sales & Enquiries > **GSM System Account Creation**

**GSM System Account Creation**

Avlite offers free on-line accounts to the owners of our GSM Monitoring series products. Use this page to create an account.

Once you have an account, log-in to this website and register each of your GSM lights. Then, you can view all your GSM light data in one place, at a glance, including historical data and graphs of performance. Of course, this does not interfere with your ability to check individual light data at will via your mobile phone SMS.

Please note: account creation is automated. A valid Avlite GSM product serial-number is required to authenticate your application. Invalid or missing codes will automatically be rejected.

Important: please submit this form once only then wait for your confirmation email. Do not repeat this process for each GSM light you own. You will be able to register all your lights after you receive your password.

First Name\* Last Name\*  
Company or Business Name Job Title  
Choose your user name\* Valid GSM Product Serial Number\*  
**Check User Name**  
Address line 1\* Address line 2  
Phone\* Mobile  
City, Town or Suburb\*  
Fax Country  
Email\* Confirm Email\*

Subscribe to email updates?   
Are you already an Avlite Systems customer?  Yes  No

**SUBMIT**

**What You Would Like To Do?**

- Subscribe to our News Bulletin
- Order a catalogue
- Request a quote
- Technical Assistance
- Find a distributor
- Become a distributor
- Register a product warranty
- Product evaluation trial

**Avlite** Head Office call : +61 (3) 5977 6128  
USA & Canada call : +1 (603) 737 1310

YOUR EMAIL ADDRESS **SUBSCRIBE**

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**Successful submissions  
will display the  
message below.**

Your request for an on-line GSM account has been sent successfully. Please check your email for your account details and further instructions. If your account details do not arrive within 1 hour, please check your email junk folder. If still no success, please DO NOT re-submit the form. You will need to contact Avlite Systems for assistance. Regards from the Avlite Systems Team

3. Check your email account for confirmed secure login details.

**Details of your new account login for Avlite Web-site**

Info@avlite.com via sid510@sslaccess.com 11:11 AM (21 minutes ago)

This email contains login details for your new account at Avlite Web-site  
This email is automatically generated - PLEASE DO NOT REPLY TO THIS EMAIL.

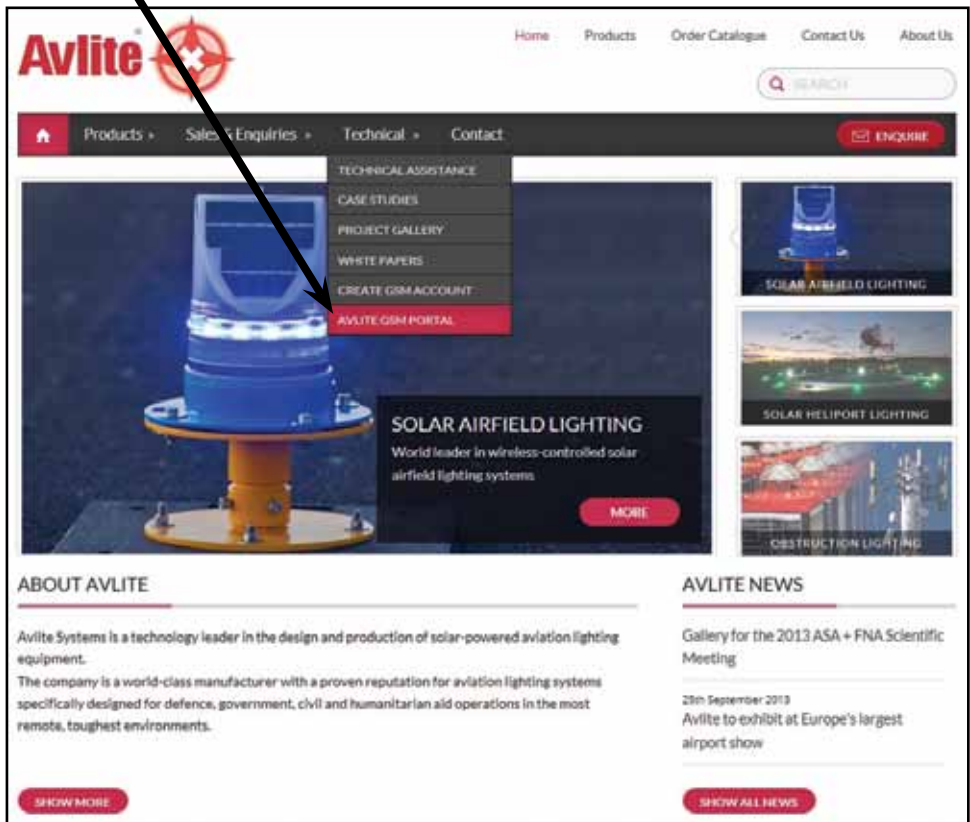
Your account details are as follows:  
User Name: AvliteUser  
Password: 12g!3r!Yp

To use your account, go to <http://www.avlite.com/>  
and login via the link "Login" at the top of the home page.  
Once logged-in, you will be able to change your password at any time you wish.



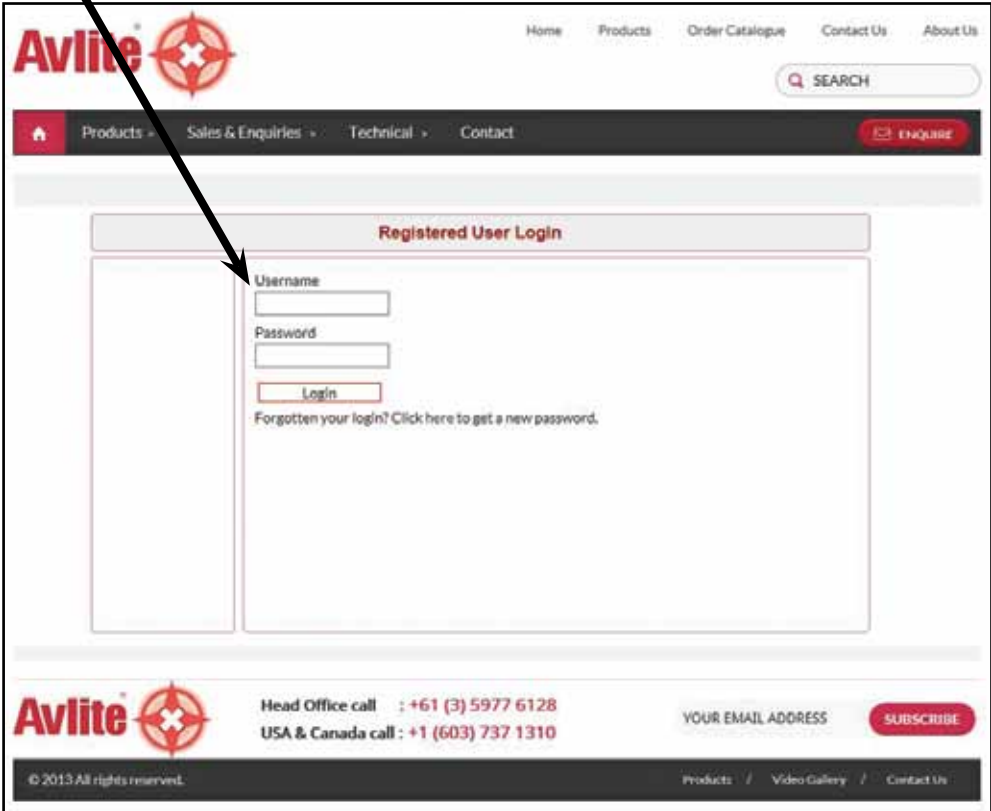
## LOG INTO YOUR GSM ACCOUNT

4. Go to **www.Avlite.com** on the internet, select the **Technical** tab, then select **AVLITE GSM PORTAL**.



The screenshot shows the Avlite website interface. At the top left is the Avlite logo and navigation links: Home, Products, Order Catalogue, Contact Us, and About Us. A search bar is located on the right. Below the navigation bar is a dark menu with options: Products, Sales Enquiries, Technical, and Contact. The 'Technical' menu is expanded, showing a list of links: TECHNICAL ASSISTANCE, CASE STUDIES, PROJECT GALLERY, WHITE PAPERS, CREATE GSM ACCOUNT, and AVLITE GSM PORTAL. A red arrow points to the 'AVLITE GSM PORTAL' link, which is highlighted in red. The main content area features a large image of a solar airfield lighting system with the text 'SOLAR AIRFIELD LIGHTING' and 'World leader in wireless-controlled solar airfield lighting systems'. To the right are three smaller images: 'SOLAR AIRFIELD LIGHTING', 'SOLAR HELIPORT LIGHTING', and 'CONSTRUCTION LIGHTING'. Below the main content are two sections: 'ABOUT AVLITE' and 'AVLITE NEWS'. The 'ABOUT AVLITE' section contains text about Avlite Systems being a technology leader in solar-powered aviation lighting equipment. The 'AVLITE NEWS' section contains a gallery for the 2013 ASA + FNA Scientific Meeting, dated 25th September 2013, mentioning Avlite's participation at Europe's largest airport show. Both sections have 'SHOW MORE' buttons.

5. Complete your login details



## GSM Dashboard

Once logged in, you will come to the **GSM Dashboard** page.

The screenshot shows the Avlite GSM Dashboard web portal. At the top left is the Avlite logo and navigation links: Home, Products, Order Catalogue, Contact Us, and About Us. A search bar is on the top right. Below this is a dark navigation bar with a home icon, links for Products, Sales & Enquiries, Technical, and Contact, and an ENQUIRE button. The main content area is titled "GSM Dashboard" and includes a welcome message: "WELCOME Avlite User, you are logged in as AvliteUsers". The dashboard is divided into several sections: a left-hand menu with options like Dashboard, Configuration Table, Deployment Map, Change Password, HELP!!, and Log Out; a Configuration Table section with a table view and drill-down options; a Deployment Map section with a map view and drill-down options; a Change Password section; and a Request Help section. The footer contains the Avlite logo, contact information for Head Office and USA & Canada, an email subscription form, and copyright information.

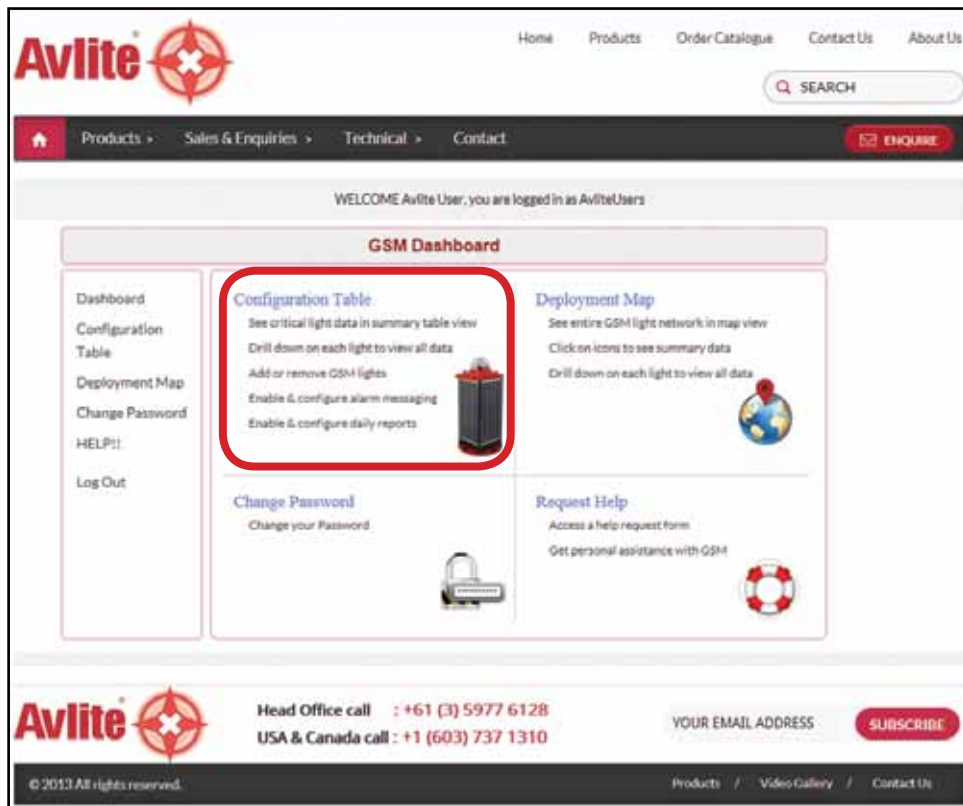
This page has menus you can use to navigate your way around Avlite's GSM Web Portal where you can perform a variety of tasks such as adding or removing GSM lights, viewing your light installations on a map, view critical light data or request help.

You can easily return to this page at any time by selecting **Dashboard** in the menu on the left of the page.

## **CONFIGURATION**

The **Configuration** menu of the **GSM Dashboard** enables you to do the following:

- See critical light data in summary table view
- Drill down on each light to view all data
- Add or remove GSM lights
- Enable & configure alarm email messaging
- Enable & configure daily email reports



The screenshot shows the Avlite website's GSM Dashboard. At the top, there is a navigation bar with links for Home, Products, Order Catalogue, Contact Us, and About Us, along with a search bar and an ENQUIRE button. Below this is a secondary navigation bar with a home icon, Products, Sales & Enquiries, Technical, and Contact, and another ENQUIRE button. A welcome message states 'WELCOME Avlite User, you are logged in as AvliteUsers'. The main content area is titled 'GSM Dashboard' and contains several sections:

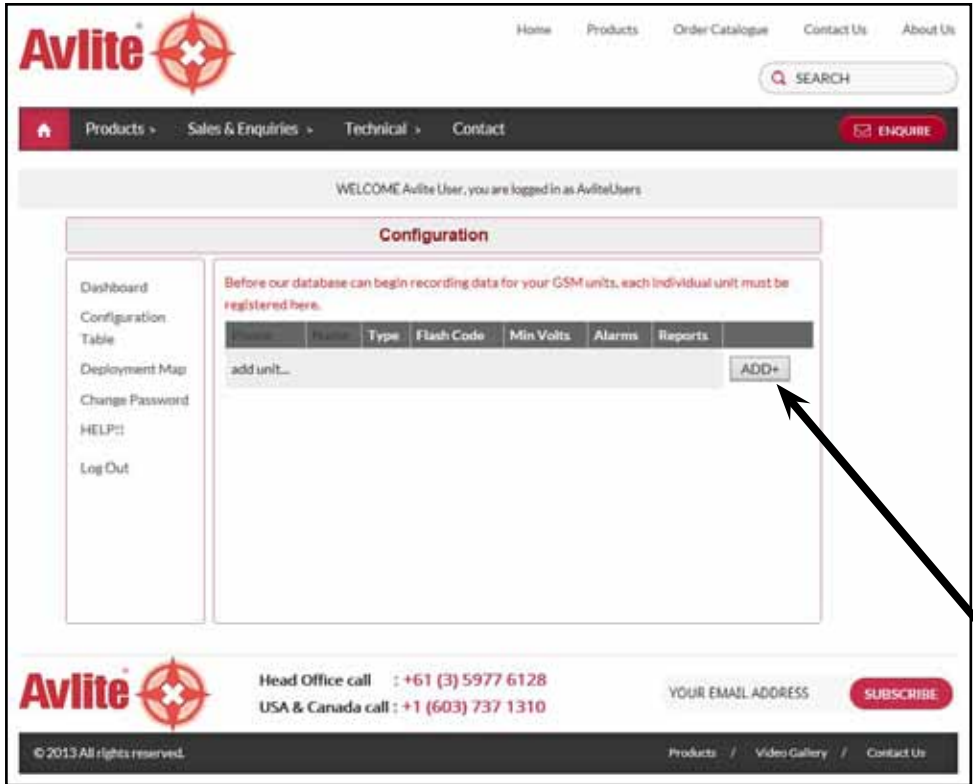
- Configuration Table:** This section is highlighted with a red rounded rectangle. It includes the following text: 'See critical light data in summary table view', 'Drill down on each light to view all data', 'Add or remove GSM lights', 'Enable & configure alarm messaging', and 'Enable & configure daily reports'. An icon of a GSM light tower is shown next to the text.
- Deployment Map:** This section includes the text: 'See entire GSM light network in map view', 'Click on icons to see summary data', and 'Drill down on each light to view all data'. A globe icon is shown next to the text.
- Change Password:** This section includes the text: 'Change your Password'. A padlock icon is shown next to the text.
- Request Help:** This section includes the text: 'Access a help request form' and 'Get personal assistance with GSM'. A lifebuoy icon is shown next to the text.

On the left side of the dashboard, there is a vertical menu with links for Dashboard, Configuration Table, Deployment Map, Change Password, HELP!!, and Log Out. At the bottom of the page, there is a footer with the Avlite logo, contact information for Head Office (+61 (3) 5977 6128) and USA & Canada (+1 (603) 737 1310), a subscription form with a SUBSCRIBE button, and a copyright notice: '© 2013 All rights reserved.'.

**Add GSM Lights**

To register your light with Avlite's secure online web reporting system you need to add it to your account:

1. Select **ConfigurationTable** from the **GSM Dashboard** or select **Configuration Table** in the menu on the left of the page.
2. Click on **ADD+**  
This can be found at the bottom right of the table.



For light data to be updated daily in the Avlite GSM Web Reports, users must first send the SMS text message command "add alarm web" to the designated light(s).

3. The following page will appear on your screen.

The screenshot shows the 'Add/Edit GSM Unit' form in the Avlite web application. The form is titled 'Add/Edit GSM Unit' and is divided into three main sections:

- 1. Identify:** This section contains a red warning message: "Phone numbers and a meaningful name are required." Below this are three input fields: "IDENTIFY UNIT", "Country", and "Number". A fourth input field is labeled "IDENTIFYING NAME".
- 2. Configure:** This section contains two red warning messages: "Enabling alarms will cause you to receive an email if this unit triggers an alarm. Alarms can be sent to up to 3 email addresses." and "Enabling reports will cause you to receive an email report from this unit daily. Reports can be sent to up to 3 email addresses." Below each message is a checkbox labeled "ENABLE ALARM EMAILS" and "ENABLE REPORT EMAILS" respectively.
- 3. Process:** This section contains two buttons: "Submit" and "Cancel".

On the left side of the form, there is a navigation menu with the following items: Dashboard, Configuration Table, Deployment Map, Change Password, HELP!!, and Log Out. Three black arrows point from a central dot on the left towards the "Country" and "Number" fields, the "ENABLE ALARM EMAILS" checkbox, and the "Submit" button.

The top navigation bar includes: Home, Products, Order Catalogue, Contact Us, and About Us. A search bar with the text "SEARCH" is located on the right. Below the navigation bar, there is a dark red bar with a home icon, "Products", "Sales & Enquiries", "Technical", "Contact", and a red "ENQUIRE" button.

At the bottom of the page, there is a footer with the Avlite logo, contact information: "Head Office call : +61 (3) 5977 6128" and "USA & Canada call : +1 (603) 737 1310", a "YOUR EMAIL ADDRESS" field with a "SUBSCRIBE" button, and a copyright notice: "© 2013 All rights reserved." The footer also includes links for "Products", "Video Gallery", and "Contact Us".

4. Fill in the details of your light:

**Identify:** Enter the light's individual cell-phone number and identifying name.  
It is suggested that the name of the light be descriptive for easy identification.

**Configure: ENABLE ALARM EMAILS**

Check this box if you wish to receive an email if this light triggers an alarm.  
Enter the email addresses of the personnel that you wish to receive alarm messages.  
You can enter the email addresses of up to 2 additional recipients.  
If an alarm is triggered an email will be sent to these addresses.

2. Configure

Enabling alarms will cause you to receive an email if this unit triggers an alarm.  
Alarms can be sent to up to 3 email addresses.

ENABLE ALARM EMAILS

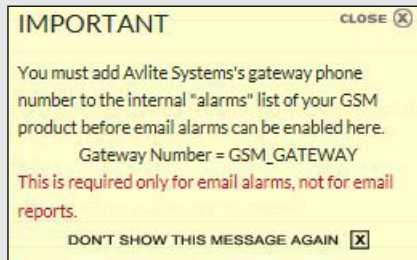
ALARM EMAIL 1 (default email for this account, see "My Details")

ALARM EMAIL 2

ALARM EMAIL 3



**When ENABLE ALARM EMAILS is selected, the following message will appear. Please see ??? for instructions to add Avlite's gateway phone number to the internal "alarms" list of your GSM product.**



**For light alarm data to be sent to the Avlite GSM Web Portal when triggered, users must first send the SMS text message command to the light to set up the particular alarm required.**



**Configure: ENABLE REPORT EMAILS**

Check this box if you wish to receive an email report from this light daily.  
Enter the email addresses of the personnel that you wish to receive daily reports.  
You can enter the email addresses of up to 2 additional recipients.

2. Configure

Enabling alarms will cause you to receive an email if this unit triggers an alarm.  
Alarms can be sent to up to 3 email addresses.

ENABLE ALARM EMAILS

---

Enabling reports will cause you to receive an email report from this unit daily.  
Reports can be sent to up to 3 email addresses.

ENABLE REPORT EMAILS

REPORT EMAIL 1 (default email for this account, see "My Details")

REPORT EMAIL 2

REPORT EMAIL 3

**Process:** Click the **Submit** button to register your light.  
Data for your light will be available approximately 24 hours from the time the light is put into actual service or powered up.

3. Process



The following page will be displayed confirming successful registration of your Avlite GSM light.

If required, you can edit the information entered for the light by selecting **EDIT**  
You are also able to register another light if required by selecting **ADD+**

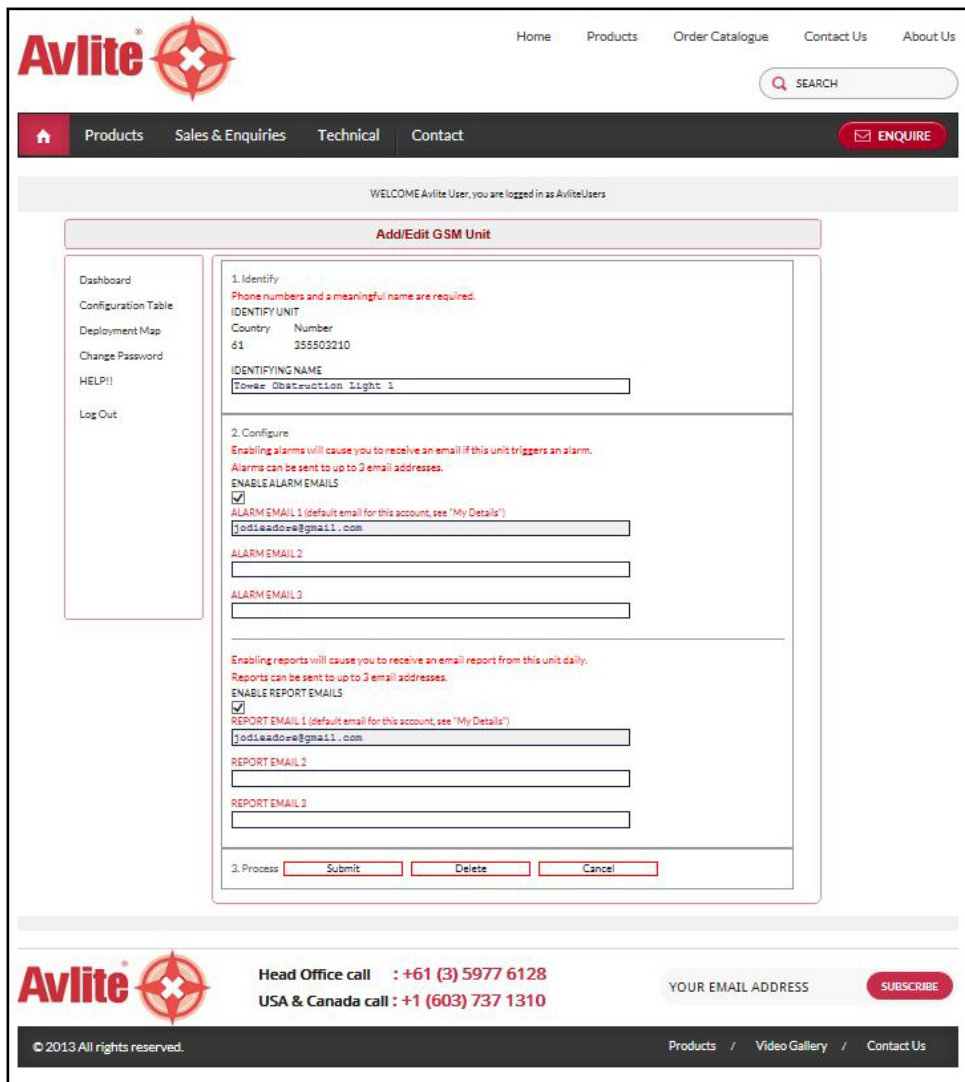
The screenshot shows the Avlite web application interface. At the top left is the Avlite logo. The navigation menu includes Home, Products, Order Catalogue, Contact Us, and About Us. A search bar is located on the right. Below the navigation is a dark bar with a home icon, menu items (Products, Sales & Enquiries, Technical, Contact), and an ENQUIRE button. A green banner displays the message "Success: update processed". The main content area is titled "Configuration" and shows "You currently have 1 GSM products registered". A table lists the product details, and buttons for "EDIT" and "ADD+" are visible. A sidebar on the left contains links for Dashboard, Configuration Table, Deployment Map, Change Password, HELP!!, and Log Out. Three arrows point from a black dot at the bottom right to the "EDIT" and "ADD+" buttons.

Phone	Name	Type	Flash Code	Min Volts	Alarms	Reports	
61355503210	Tower Obstruction Light 1	No data	No data	No data	ON	ON	EDIT
add unit...							

**Edit GSM Light Information**

To modify the lights information:

1. Select **Configure** from the **GSM Dashboard** or select **Configuration Table** in the menu on the left of the page.
2. Locate the light you wish to modify and click on **EDIT** (this appears to the right of the light).
3. Modify the light details and click the **Submit** button at the bottom of the page.



The screenshot shows the Avlite web application interface. At the top, there is a navigation bar with the Avlite logo, a search bar, and links for Home, Products, Order Catalogue, Contact Us, and About Us. Below this is a secondary navigation bar with links for Products, Sales & Enquiries, Technical, and Contact, along with an ENQUIRE button. A welcome message states 'WELCOME Avlite User, you are logged in as AvliteUsers'.

The main content area is titled 'Add/Edit GSM Unit'. On the left is a sidebar menu with options: Dashboard, Configuration Table, Deployment Map, Change Password, HELP!!, and Log Out. The main form is divided into three sections:

- 1. Identify:** Includes a red warning 'Phone numbers and a meaningful name are required.' and a table for 'IDENTIFY UNIT' with columns 'Country' and 'Number'. The 'Country' is '61' and 'Number' is '35502210'. Below is a text field for 'IDENTIFYING NAME' with the value 'Towar Obatection Light 1'.
- 2. Configure:** Includes a red warning 'Enabling alarms will cause you to receive an email if this unit triggers an alarm. Alarms can be sent to up to 3 email addresses.' and a section for 'ENABLE ALARM EMAILS' with a checked checkbox. It contains three text fields for 'ALARM EMAIL 1', 'ALARM EMAIL 2', and 'ALARM EMAIL 3', all containing 'jedleadore@gmail.com'. Below is a section for 'ENABLE REPORT EMAILS' with a checked checkbox and three text fields for 'REPORT EMAIL 1', 'REPORT EMAIL 2', and 'REPORT EMAIL 3', all containing 'jedleadore@gmail.com'.
- 3. Process:** Contains three buttons: 'Submit', 'Delete', and 'Cancel'.

At the bottom of the page, there is a footer with the Avlite logo, contact information for Head Office (+61 (3) 5977 6128) and USA & Canada (+1 (603) 737 1310), a 'SUBSCRIBE' button, and a copyright notice '© 2013 All rights reserved.' along with links for Products, Video Gallery, and Contact Us.

4. The following screen will appear to inform you that your update was processed successfully.

The screenshot shows the Avlite user interface. At the top left is the Avlite logo. Navigation links include Home, Products, Order Catalogue, Contact Us, and About Us. A search bar is located on the right. Below the navigation is a dark bar with a home icon, menu items (Products, Sales & Enquiries, Technical, Contact), and an ENQUIRE button. A green banner displays the message: "Success: update processed". Below this is the "Configuration" section, which states "You currently have 1 GSM products registered" and contains a table with one entry: "Tower Obstruction Light 1". The table has columns for Product, Name, Type, Flash Code, Min Volts, Alarm, and Reports. A sidebar on the left lists menu items like Dashboard, Configuration Table, Deployment Map, Change Password, HELP!!, and Log Out. The footer contains contact information for Head Office and USA & Canada, an email subscription field, and copyright information.

Product	Name	Type	Flash Code	Min Volts	Alarm	Reports	
61355503210	Tower Obstruction Light 1	No data	No data	No data	ON	ON	EDIT
add unit...							ADD+

### Remove GSM Lights

To remove a light:

1. Select **Configuration** from the **GSM Dashboard** or select **Configuration Table** in the menu on the left of the page.
2. Locate the light you wish to remove and click on **EDIT** (this appears to the right of the light).
3. Click the **Delete** button at the bottom of the page to remove the selected light.

The screenshot shows the Avlite website interface. At the top, there is a navigation bar with links for Home, Products, Order Catalogue, Contact Us, and About Us. Below this is a search bar and an 'ENQUIRE' button. A welcome message states 'WELCOME Avlite User, you are logged in as AvliteUsers'. The main content area is titled 'Add/Edit GSM Unit'. On the left, there is a sidebar menu with options: Dashboard, Configuration Table, Deployment Map, Change Password, HELP!!, and Log Out. The main form contains the following sections:

- 1. Identify**: Includes a red warning 'Phone numbers and a meaningful name are required.' and fields for 'IDENTIFY UNIT', 'Country' (61), 'Number' (355502210), and 'IDENTIFYING NAME' (Power Obstruction Light 1).
- 2. Configure**: Includes a red warning 'Enabling alarms will cause you to receive an email if this unit triggers an alarm. Alarms can be sent to up to 3 email addresses.' and fields for 'ENABLE ALARM EMAILS' (checked), 'ALARM EMAIL 1' (jodieadore@gmail.com), 'ALARM EMAIL 2', and 'ALARM EMAIL 3'.
- 3. Process**: Includes a red warning 'Enabling reports will cause you to receive an email report from this unit daily. Reports can be sent to up to 3 email addresses.' and fields for 'ENABLE REPORT EMAILS' (checked), 'REPORT EMAIL 1' (jodieadore@gmail.com), 'REPORT EMAIL 2', and 'REPORT EMAIL 3'. Below these fields are three buttons: 'Submit', 'Delete', and 'Cancel'.

A large black arrow points from the top right towards the 'Delete' button in the '3. Process' section.

At the bottom of the page, there is a footer with the Avlite logo, contact information (Head Office call: +61 (3) 5977 6128, USA & Canada call: +1 (603) 737 1310), a 'SUBSCRIBE' button, and a copyright notice: © 2013 All rights reserved. There is also a navigation bar for Products, Video Gallery, and Contact Us.

**See Critical Light Data in Summary View Table**

This will take you to a new page with a summary listing of all your GSM lights registered in the system.

1. Select **Configuration** from the **GSM Dashboard** or select **Configuration Table** in the menu on the left of the page.
2. The following table summary will appear:

The screenshot shows the Avlite web application interface. At the top, there is a navigation bar with links for Home, Products, Order Catalogue, Contact Us, and About Us. Below this is a search bar and a navigation menu with options like Products, Sales & Enquiries, Technical, and Contact. A welcome message states 'WELCOME Avlite User, you are logged in as AvliteUsers'. The main content area is titled 'Configuration' and displays 'You currently have 2 GSM products registered'. A table lists the products with columns for Phone, Name, Type, Flash Code, Min Yrds, Alarms, and Reports. The second product, 'Tower Obstruction Light 2', has a red background, and an arrow points to the 'ON' status in the Reports column. The footer contains contact information for Head Office and USA & Canada, along with a subscription form and copyright notice.

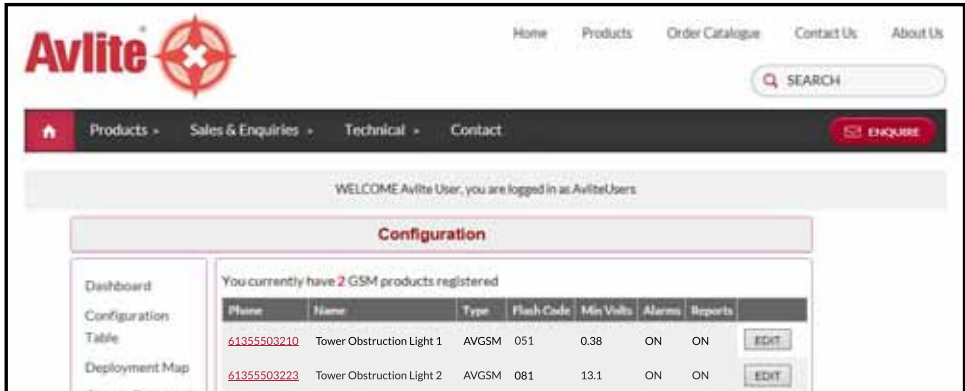
Phone	Name	Type	Flash Code	Min Yrds	Alarms	Reports	
61355503210	Tower Obstruction Light 1	AVGSM	051	0.38	ON	ON	EDIT
61355503223	Tower Obstruction Light 2	AVGSM	081	13.1	ON	ON	EDIT
add unit...							
ADD+							

3. The background colour of a particular light will change to a red colour if an alarm condition is present.

**Drill Down on Each Light to View All Data**

This will take you to a new page showing detailed information for the GSM light selected.

1. Select **Configuration** from the **GSM Dashboard** or select **Configuration Table** in the menu on the left of the page.
2. The following table summary will appear:



The screenshot shows the Avlite web interface. At the top, there is a navigation bar with links for Home, Products, Order Catalogue, Contact Us, and About Us. Below this is a search bar and a menu with options like Products, Sales & Enquiries, Technical, and Contact. A message says "WELCOME Avlite User, you are logged in as: AvliteUsers". The main content area is titled "Configuration" and states "You currently have 2 GSM products registered". A table lists these products:

Phone	Name	Type	Flash Code	Min Visits	Alarms	Reports	
<a href="#">61355503210</a>	Tower Obstruction Light 1	AVGSM	051	0.38	ON	ON	<a href="#">EDIT</a>
<a href="#">61355503223</a>	Tower Obstruction Light 2	AVGSM	081	13.1	ON	ON	<a href="#">EDIT</a>

3. Click the cell-phone number of the light you wish to view in more detail.
4. The following detailed report for the light will appear in a new window.  
Breaks in the data represent periodic absence of data transmission or removal of light for servicing.



The screenshot shows a detailed report for "Tower Obstruction Light 1". It features a "MONTH CHART" at the top, followed by a table of "Alarm" events. A red arrow points to an entry in the "Alarm" table:

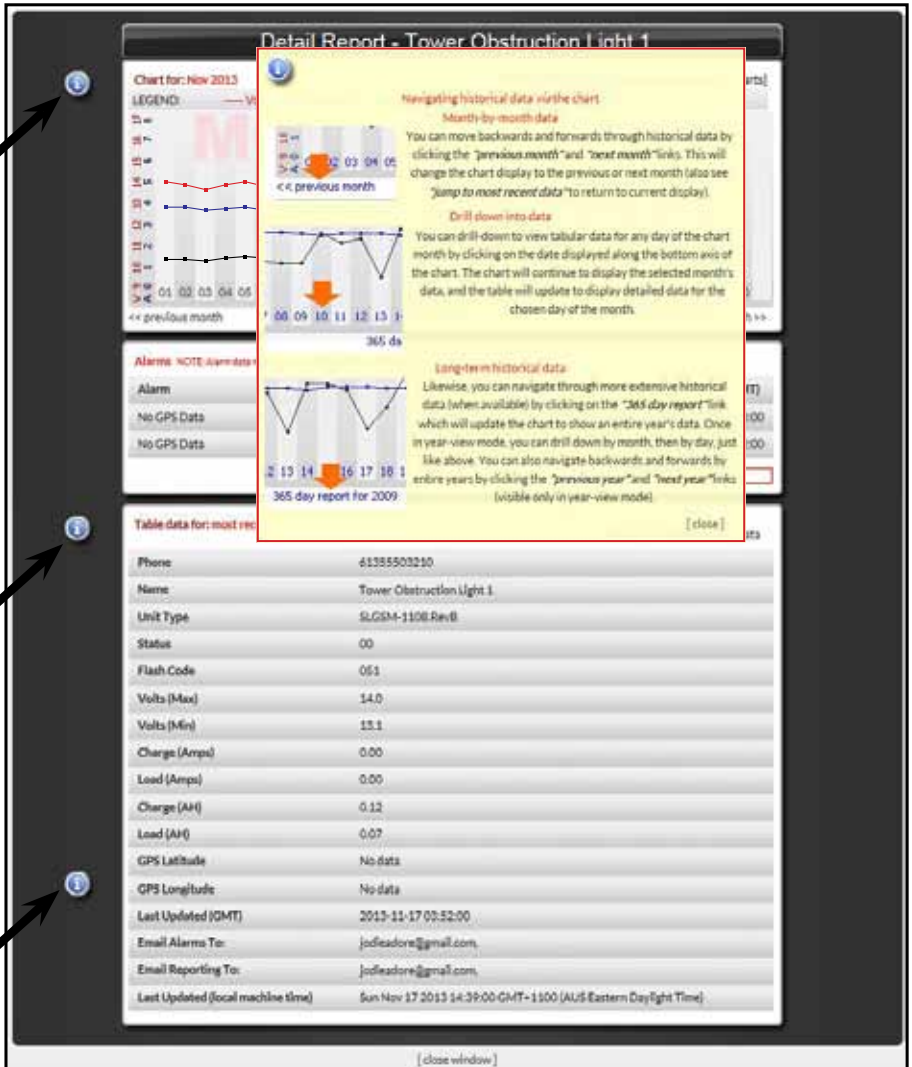
Alarm	Information	Alarm Report (PDF)
No GPS Data	(Click to view details)	(Click to view details)
No GPS Data	(Click to view details)	(Click to view details)

Below the alarm table is a "Table for reference" section containing detailed product information:

- Phone: 61355503210
- Name: Tower Obstruction Light 1
- Flash Type: 0510A (0510A-D)
- Model: 08
- Flash Code: 051
- Units Used: 04.5
- Units Used: 03.5
- Charge Cycle: 020
- Send (Phone): 020
- Charge (MS): 010
- Send (SMS): 020
- Service Fee: No Data
- GPS Longitude: No Data
- Send Location (SMS): 0510 (0510A-D)
- Send Alarm To: info@avlite.com
- Send Reporting To: info@avlite.com
- Send Location (SMS) Time: Sun Nov 17 2013 14:13:00 GMT+01:00 (GMT+01:00) (UTC+01:00) (GMT+01:00)

Light with an alarm

5. For help viewing detailed information about Charts, Data and Email Reporting click on the 'i' button to the left of the screen:



**Chart help**

**Data help**

**Email reporting help**

**Detail Report - Tower Obstruction Light 1**

**Chart for: Nov 2013**

**LEGEND**

Monthly-by-month data  
You can move backwards and forwards through historical data by clicking the "previous month" and "next month" links. This will change the chart display to the previous or next month (also see "Jump to most recent data" to return to current display).

Drill down into data  
You can drill-down to view tabular data for any day of the chart month by clicking on the date displayed along the bottom axis of the chart. The chart will continue to display the selected month's data, and the table will update to display detailed data for the chosen day of the month.

Long-term historical data  
Likewise, you can navigate through more extensive historical data (when available) by clicking on the "365 day report" link which will update the chart to show an entire year's data. Once in year-view mode, you can drill down by month, then by day, just like above. You can also navigate backwards and forwards by entire years by clicking the "previous year" and "next year" links (visible only in year-view mode).

[close]

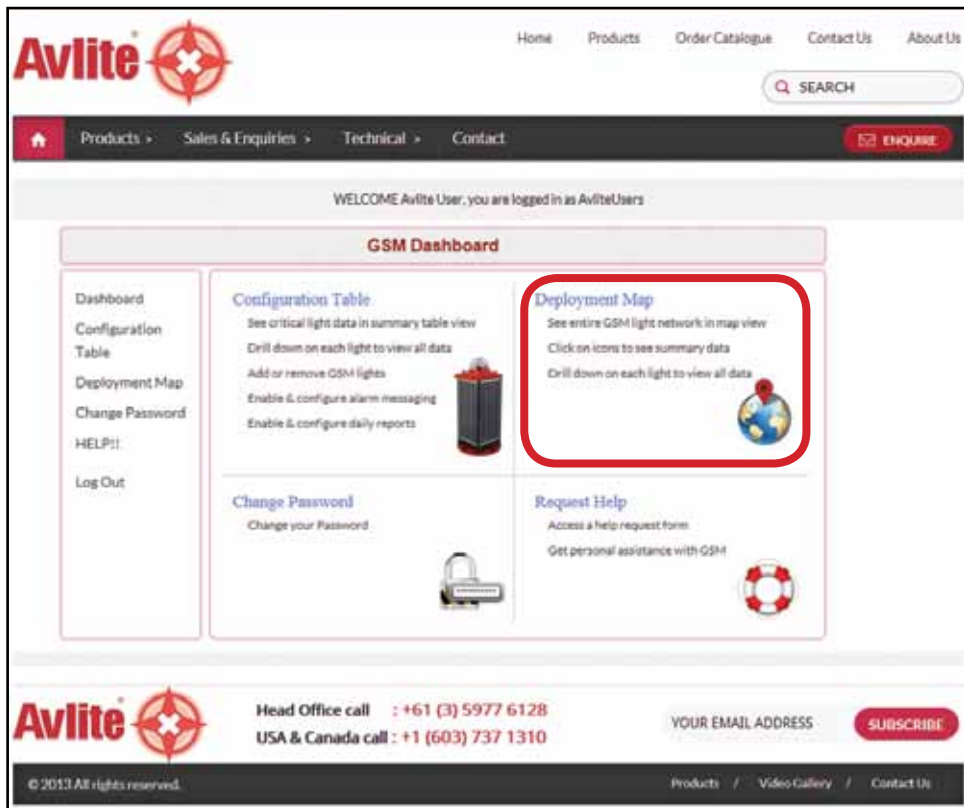
Table data for: most rec	
Phone	61355503210
Name	Tower Obstruction Light 1
Unit Type	SLGSM-1108 Rev B
Status	00
Flash Code	051
Volts (Max)	14.0
Volts (Min)	13.1
Charge (Amps)	0.00
Load (Amps)	0.00
Charge (AH)	0.12
Load (AH)	0.07
GPS Latitude	No data
GPS Longitude	No data
Last Updated (GMT)	2013-11-17 00:52:00
Email Alarms To:	jodfeadore@gmail.com
Email Reporting To:	jodfeadore@gmail.com
Last Updated (local machine time)	Sun Nov 17 2013 14:39:00 GMT-1100 (AUS Eastern Daylight Time)

[close window]

## DEPLOYMENT MAP

The **Deployment Map** section of the **GSM Dashboard** enables you to do the following:



- See entire GSM light network in map view
- Click on items to see summary data
- Drill down on each light to view all data

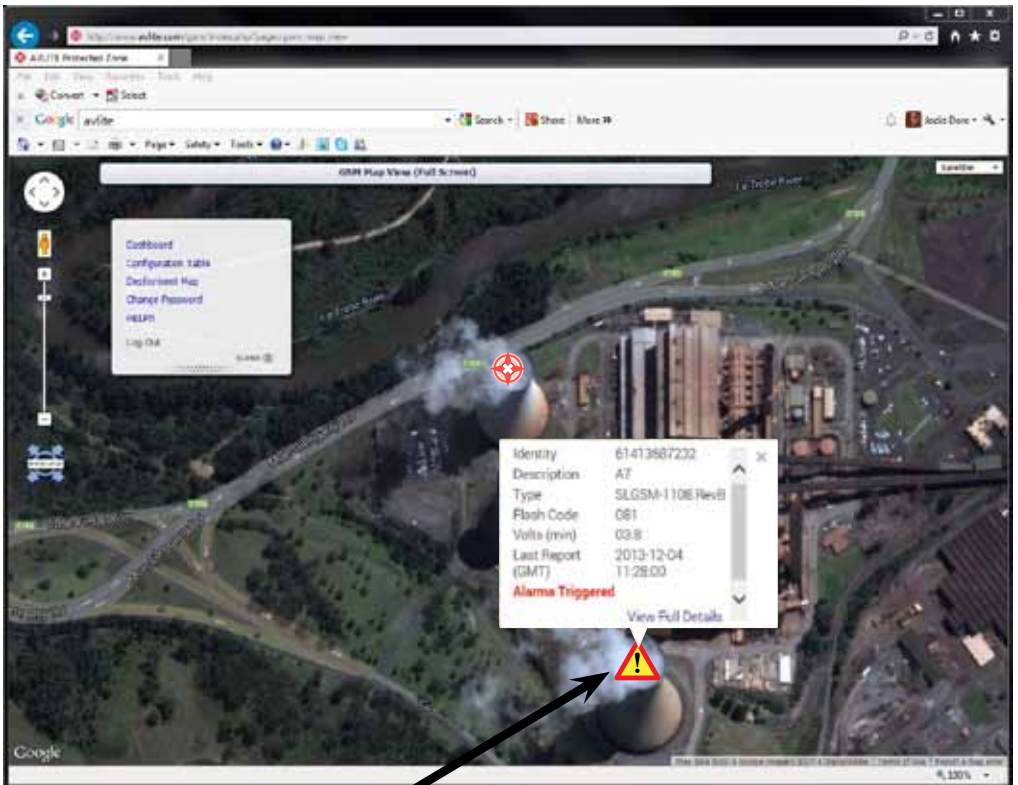


The screenshot shows the Avlite website's GSM Dashboard. At the top, there is a navigation bar with links for Home, Products, Order Catalogue, Contact Us, and About Us. Below this is a search bar and a menu with options like Products, Sales & Enquiries, Technical, and Contact. A welcome message states 'WELCOME Avlite User, you are logged in as AvliteUsers'. The main content area is titled 'GSM Dashboard' and contains several sections: a sidebar with links to Dashboard, Configuration Table, Deployment Map, Change Password, and HELP!; a Configuration Table section with a list of actions and a light tower icon; a Deployment Map section (highlighted with a red box) with a list of actions and a globe icon; a Change Password section with a padlock icon; and a Request Help section with a lifebuoy icon. At the bottom, there is a footer with the Avlite logo, contact information for Head Office and USA & Canada, a subscription form, and copyright information.



This allows you to view the location of your GSM Light installations via map.

1. Select **Deployment Map** from the **GSM Dashboard** or select **Deployment Map** in the menu on the left of the page.
2. A map of your GSM lights will appear with the Avlite Logo indicating the location of your installation(s). Use the zoom in/out tool bar at the top left of the page to navigate around the map.
3. To see summary data for a specific light, click on the Avlite icon on the map.   
A call-out box appears on the map with the summary data of the light.
4. The Avlite Logo will be highlighted as a warning symbol if an alarm condition occurs. 
5. To drill down on the light to view all data, click on **View Full Details** in the call-out box and a new window will open displaying detailed information about the light.



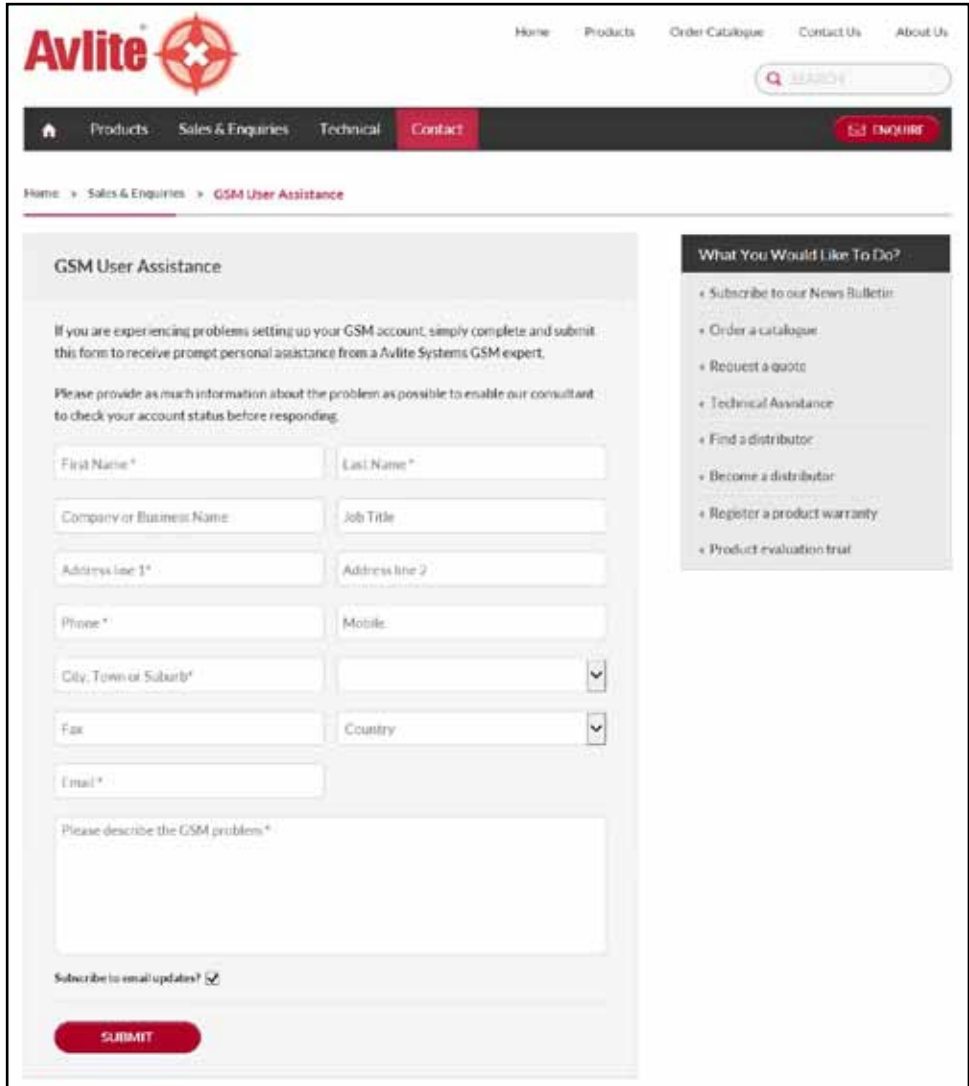
**Light with an alarm condition**

## REQUEST HELP

The **Request Help** menu of the **GSM Dashboard** enables you to submit a form to Avlite to request assistance from an Avlite GSM expert.

The screenshot displays the Avlite website's GSM Dashboard. At the top, there is a navigation bar with links for Home, Products, Order Catalogue, Contact Us, and About Us, along with a search bar. Below this is a secondary navigation bar with links for Products, Sales & Enquiries, Technical, and Contact, and a red ENQUIRE button. The main content area is titled "GSM Dashboard" and includes a welcome message: "WELCOME Avlite User, you are logged in as AvliteUsers". The dashboard is divided into several sections: a left sidebar with links for Dashboard, Configuration Table, Deployment Map, Change Password, HELP!, and Log Out; a central "Configuration Table" section with a list of actions and a light tower icon; a "Deployment Map" section with a globe icon; a "Change Password" section with a padlock icon; and a "Request Help" section, which is highlighted with a red rounded rectangle. The "Request Help" section contains the text "Access a help request form" and "Get personal assistance with GSM" along with a lifebuoy icon. At the bottom of the page, there is a footer with the Avlite logo, contact information for Head Office and USA & Canada, an email subscription form, and a copyright notice.

1. Select **Request Help** from the **GSM Dashboard** or select **HELP!!** in the menu on the left of the page.
2. The following form will appear.
3. Complete the details.
4. Click **Submit**



**Avlite** Home Products Order Catalogue Contact Us About Us

SEARCH

Products Sales & Enquiries Technical **Contact** ENQUIRE

Home > Sales & Enquiries > **GSM User Assistance**

### GSM User Assistance

If you are experiencing problems setting up your GSM account, simply complete and submit this form to receive prompt personal assistance from a Avlite Systems GSM expert.

Please provide as much information about the problem as possible to enable our consultant to check your account status before responding.

First Name\* Last Name\*

Company or Business Name Job Title

Address line 1\* Address line 2

Phone\* Mobile

City, Town or Suburb\*

Fax Country

Email\*

Please describe the GSM problem\*

Subscribe to email updates?

**SUBMIT**

#### What You Would Like To Do?

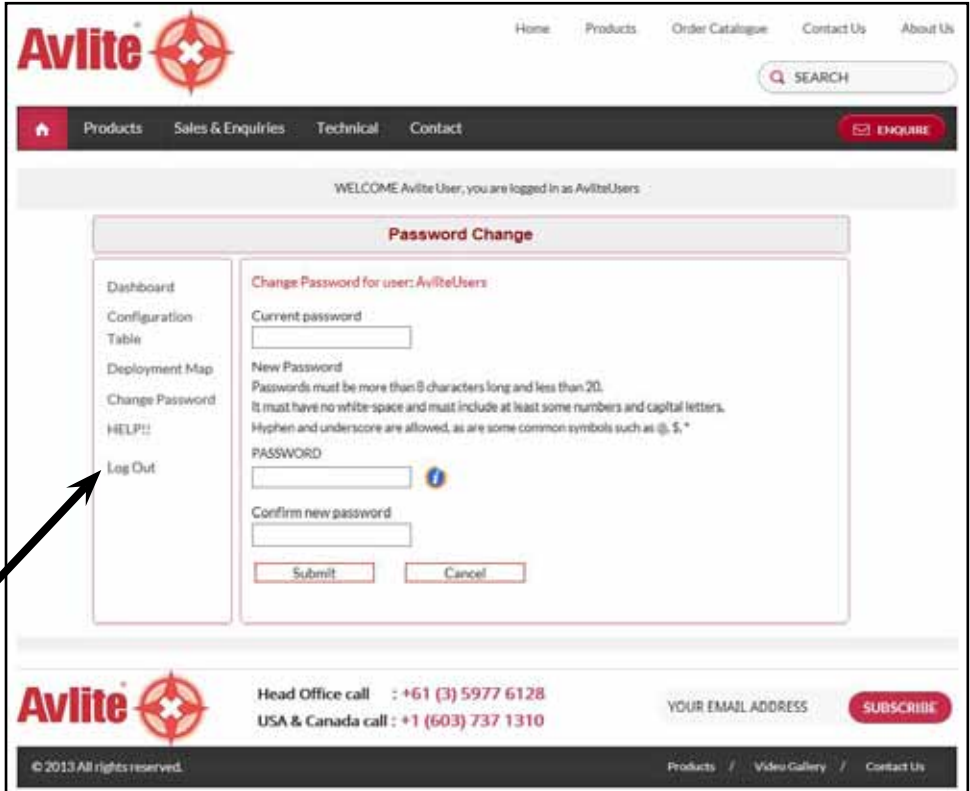
- Subscribe to our News Bulletin
- Order a catalogue
- Request a quote
- Technical Assistance
- Find a distributor
- Become a distributor
- Register a product warranty
- Product evaluation trial

## **CHANGE PASSWORD**

The **Change Password** menu of the **GSM Dashboard** enables you to change your password:

The screenshot displays the Avlite website's GSM Dashboard. At the top left is the Avlite logo with a compass rose icon. To the right are navigation links: Home, Products, Order Catalogue, Contact Us, and About Us. Below this is a search bar with a magnifying glass icon and the word "SEARCH". A dark navigation bar contains a home icon, "Products >", "Sales & Enquiries >", "Technical >", "Contact", and a red "ENQUIRE" button. A welcome message reads "WELCOME Avlite User, you are logged in as AvliteUsers". The main content area is titled "GSM Dashboard" and is divided into several sections. On the left is a vertical menu with links: Dashboard, Configuration Table, Deployment Map, Change Password, HELP!:, and Log Out. The "Change Password" link is highlighted with a red rounded rectangle. The "Configuration Table" section includes links for "See critical light data in summary table view", "Drill down on each light to view all data", "Add or remove GSM lights", "Enable & configure alarm messaging", and "Enable & configure daily reports", accompanied by a server rack icon. The "Deployment Map" section includes links for "See entire GSM light network in map view", "Click on icons to see summary data", and "Drill down on each light to view all data", accompanied by a globe icon. The "Request Help" section includes links for "Access a help request form" and "Get personal assistance with GSM", accompanied by a lifebuoy icon. At the bottom, there is a footer with the Avlite logo, contact numbers for Head Office (+61 (3) 5977 6128) and USA & Canada (+1 (603) 737 1310), a "YOUR EMAIL ADDRESS" field with a red "SUBSCRIBE" button, and a copyright notice "© 2013 All rights reserved." along with navigation links for "Products / Video Gallery / Contact Us".

1. Select **Change Password** from the **GSM Dashboard** or select **Change Password** in the menu on the left of the page.
2. Complete the details.
3. Click **Submit**



**REMEMBER TO LOG OUT WHEN YOU HAVE FINISHED VIEWING  
YOUR GSM LIGHT DATA**

(click "Log Out" in the menu on the left of the page)

### Light Installation Location

The light must be installed in a location where there is adequate GSM and if fitted GPS signal coverage from your service provider.

Final GPS location of your light can be obtained via SMS text message once it is installed and the power is connected.

Data will not be available from the GSM Monitoring and Alarm System for a minimum of 1 minute after the power has been connected.

#### **GSM MONITORING AND ALARM LIGHTS: DESIGNATED LIGHTS SIM CARD NUMBERS**

<b>Light Name (eg. Channel Light 1)</b>	<b>Installation Location</b>	<b>Cell phone Number (eg. +61432123456)</b>	<b>Master Telephone Number (eg. +61456123456)</b>

**REMOTE ACCESS CELL PHONE NUMBERS**

Light Name	Contact Name	Cell phone Number (eg. +61432123456)



**REMOTE REPORT CELL PHONE NUMBERS & EMAIL CONTACTS**

Light Name	Contact Name	Cell phone Number (eg. +61432123456)	Email Address





## **Trouble Shooting**

### **Initial Setup**

The most important step in the process of setting up your GSM monitoring and alarm module is to ensure desired cell phone numbers are programmed into the access list.

Use the list access command (see “Sending Commands” on page 20) to confirm cell phone numbers are correctly entered. Re-enter from a correctly listed cell phone the numbers required.

If the initial access list number(s) are incorrectly entered, lost, or if the light’s cell phone number will not respond, power up the light and email Avlite technicians (info@Avlite.com) the following details:

- Designated Light SIM Card Number
- Country Code
- Light Serial Number \*\*

*\*\* Please Note: A charge may be levied for this service*

### **Web Reporting**

If no data is available from your secure web login after following the outlined procedure:

- Send the SMS text message “list alarm” to check that the alarm to the web has is enabled
- If the alarm has been enabled, then re-send the SMS text message “add web +61416906478” to ensure the gateway is open.

**Trouble Shooting Table**

<b>Problem</b>	<b>Remedy</b>
Light will not activate.	<ul style="list-style-type: none"> <li>• Ensure light is in darkness.</li> <li>• Wait at least 60 seconds for the program to initialise in darkness.</li> <li>• Ensure switch setting is on a valid code (not unused flash code).</li> <li>• Ensure battery terminals are properly connected.</li> <li>• Ensure battery voltage is above 12volts.</li> </ul>
Timing codes will not change.	<ul style="list-style-type: none"> <li>• Turn rotary switches several times to ensure contacts are clear.</li> </ul>
Light will not operate for the entire night.	<ul style="list-style-type: none"> <li>• Expose light to direct sunlight and monitor operation for several days. Avlite products typically require 1.5 hours of direct sunlight per day to retain full autonomy. From a discharged state, the light may require several days of operational conditions to 'cycle' up to full autonomy.</li> <li>• Reducing the light output intensity or duty cycle (flash code) will reduce current draw on the battery.</li> <li>• Ensure solar module is clean and not covered by shading during the day.</li> </ul>
My light won't respond to the 1st message I send on setup.	<ul style="list-style-type: none"> <li>• Ensure SIM card is active, has credit, and is fitted correctly.</li> <li>• Ensure there is no PASSWORD on the SIM card account and the SIM Card is unlocked.</li> </ul>
My SMS reports are sometimes showing N/A or reports that "no data" has been received.	<ul style="list-style-type: none"> <li>• This indicates that the GPS or battery charge at night is not available. Otherwise the light may have failed therefore responding with a reading of "N/A" (not available). Contact Avlite for further help.</li> </ul>
When I send an SMS there is no SMS response from the light within 5-20 minutes.	<ul style="list-style-type: none"> <li>• The cell phone monitoring system is reliant on cell phone coverage and gateway traffic, and may suffer from occasional drop outs, or the light may be located in a marginal GSM coverage area (check with your local network provider for coverage details). One or all of these parameters affect the performance of your monitoring system.</li> <li>• The GSM implements a sleep cycle to save power. Under normal conditions the GSM will be put to sleep for 3 hours at a time.</li> </ul>
When I send an SMS there is no response.	<ul style="list-style-type: none"> <li>• Check the number you are ringing from is listed in the access list or the report list.</li> <li>• Try sending the SMS from a different phone using a different network.</li> </ul>

### Light Board Indicator / Status LED's

All Avlite light boards are fitted with two Indicator LED's. These are positioned on the edge of the board, near the Flash Code Rotary Switches. Use the table below to help determine operational status.

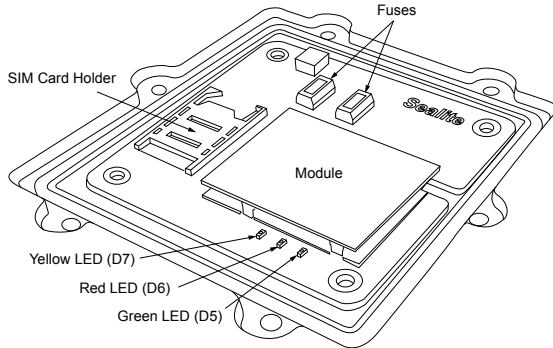
<b>Yellow Status LED</b>	<b>Condition</b>
<b>Off</b>	Daylight, Standby
<b>Quick Flashing</b>	Day to Night transition
<b>2 Quick Flashes</b>	Night Operation, Not Synchronized
<b>1 Quick Flash</b>	Night Operation, Sync in Progress
<b>Slow Flashing</b>	Night Operation, Synchronized

<b>Red Status LED</b>	<b>Condition</b>
<b>Steady</b>	Flat Battery cutoff is in effect (Below 10.0V)
<b>Slow</b>	High Voltage (Above 13.5V)
<b>Off</b>	Optimal Voltage (12.5V to 13.5V)
<b>1 Quick</b>	Ok Voltage (12.0V to 12.5V)
<b>2 Quick</b>	Low Voltage (11.5V to 12.0V)
<b>3 Quick</b>	Poor Voltage (10.0V to 11.5V)
<b>4 Quick</b>	Flat Voltage (Below 10.0V)

### Phone Module Indicator / Status LED's

The GSM board is fitted with a number of Indicator LED's. Use the diagram below to help determine operational status.

To view Indicator LED's follow the steps shown on in the "Installing a SIM Card" section of this manual



LED Combinations			Condition
Green LED	Red LED	Yellow LED	
Steady	Off	Off	The setup of the GSM module has failed. Check that the module is present. Reset the unit and try again. <i>Note: The unit will automatically reset within 1 hour and try again.</i>
Slow	Steady	Steady	The GSM module is in the process of being setup. The SIM card has failed. Check that the SIM card is present and inserted correctly.
Slow	Slow	Steady	The GSM module is in the process of being setup. The SIM card is locked, please insert the SIM card into a handset and unlock the PIN.
1 Quick	1 Quick	Steady	The GSM module setup is complete. The SIM card is ready for operation. The signal is not detectable. Check that the antenna is present and connected to the GSM module.
1 Quick	1 Quick	Slow	The GSM module setup is complete. The SIM card is ready for operation. The network is NOT ready.
1 Quick	1 Quick	1 Quick (Low) 2 Quick (OK) 3 Quick (Good) 4 Quick (Max)	The GSM module setup is complete. The SIM card is ready for operation. The network is ready. The yellow status LED indicates signal strength.
2 Quick	Off	Off	GSM Module setup is complete and the GSM module is asleep.



**Notes**



## Avlite Light Warranty V1.1

### Activating the Warranty

Upon purchase, the Avlite Systems warranty must be activated for recognition of future claims. To do this you have two (2) options:

1. **Postal Registration**

Please complete the Avlite Systems Warranty Registration Card and return to Avlite within 30 days of your purchase.

2. **Online Registration**

Please complete the Online Registration Form at; [www.avlite.com](http://www.avlite.com)

***Avlite Systems will repair or replace your lantern in the event of electronic failure for a period of up to three years from the date of purchase.***

***The unit must be returned to Avlite freight prepaid.***

### Warranty Terms

1. Avlite Systems warrants that any Avlite aviation products fitted with telemetry equipment including but not limited to AIS, GSM, GPS or RF ("Telemetry Products") will be free from defective materials and workmanship under normal and intended use, subject to the conditions hereinafter set forth, for a period of twelve (12) months from the date of purchase by the original purchaser.
2. Avlite Systems warrants that any rotationally-moulded products ("Roto-Moulded Products") and accessory products ("Accessory Products") will be free from defective materials and workmanship under normal and intended use, subject to the conditions hereinafter set forth, for a period of twelve (12) months from the date of purchase by the original purchaser.
3. Avlite Systems warrants that any Avlite aviation products other than the Telemetry Products, Roto-Moulded Products and Accessory Products ("Avlite Products") will be free from defective materials and workmanship under normal and intended use, subject to the conditions hereinafter set forth, for a period of three (3) years from the date of purchase by the original purchaser.
4. Avlite Systems will repair or replace, at Avlite's sole discretion, any Telemetry Products, Roto-Moulded Products, Accessory Products or Avlite Products found to be defective in material and workmanship in the relevant warranty period so long as the Warranty Conditions (set out below) are satisfied.
5. If any Telemetry Products or Avlite Products are fitted with a rechargeable battery, Avlite Systems warrants the battery will be free from defect for a period of one (1) year when used within original manufacturer's specifications and instructions.

### Warranty Conditions

This Warranty is subject to the following conditions and limitations;

1. The warranty is applicable to lanterns manufactured from 1/1/2009.
2. The warranty is void and inapplicable if:
  - a. the product has been used or handled other than in accordance with the instructions in the owner's manual and any other information or instructions provided to the customer by Avlite;
  - b. the product has been deliberately abused, or misused, damaged by accident or neglect or in being transported; or
  - c. the defect is due to the product being repaired or tampered with by anyone other than Avlite or authorised Avlite repair personnel.
3. The customer must give Avlite Systems notice of any defect with the product within 30 days of the customer becoming aware of the defect.
4. Rechargeable batteries have a limited number of charge cycles and may eventually need to be replaced. Typical battery replacement period is 3-4 years. Long term exposure to high temperatures will shorten the battery life. Batteries used or stored in a manner inconsistent with the manufacturer's specifications and instructions shall not be covered by this warranty.



5. No modifications to the original specifications determined by Avlite shall be made without written approval of Avlite Systems.
6. Avlite lights can be fitted with 3rd party power supplies and accessories but are covered by the 3rd party warranty terms and conditions.
7. The product must be packed and returned to Avlite Systems by the customer at his or her sole expense. Avlite Systems will pay return freight of its choice. A returned product must be accompanied by a written description of the defect and a photocopy of the original purchase receipt. This receipt must clearly list model and serial number, the date of purchase, the name and address of the purchaser and authorised dealer and the price paid by the purchaser. On receipt of the product, Avlite Systems will assess the product and advise the customer as to whether the claimed defect is covered by this warranty.
8. Avlite Systems reserves the right to modify the design of any product without obligation to purchasers of previously manufactured products and to change the prices or specifications of any product without notice or obligation to any person.
9. Input voltage shall not exceed those recommended for the product.
10. Warranty does not cover damage caused by the incorrect replacement of battery in solar lantern models.
11. This warranty does not cover any damage or defect caused to any product as a result of water flooding or any other acts of nature.
12. There are no representations or warranties of any kind by Avlite or any other person who is an agent, employee, or other representative or affiliate of Avlite, express or implied, with respect to condition of performance of any product, their merchantability, or fitness for a particular purpose, or with respect to any other matter relating to any products.

### **Limitation of Liability**

To the extent permitted by section 68A of the Trade Practices Act 1974 (Cth), the liability of Avlite Systems under this Warranty will be, at the option of Avlite Systems, limited to either the replacement or repair of any defective product covered by this Warranty. Avlite Systems will not be liable to Buyer for consequential damages resulting from any defect or deficiencies in accepted items.

### **Limited to Original Purchaser**

This Warranty is for the sole benefit of the original purchaser of the covered product and shall not extend to any subsequent purchaser of the product.

### **Miscellaneous**

Apart from the specific warranties provided under this warranty, all other express or implied warranties relating to the above product is hereby excluded to the fullest extent allowable under law. The warranty does not extend to any lost profits, loss of good will or any indirect, incidental or consequential costs or damages or losses incurred by the purchaser as a result of any defect with the covered product.

### **Warrantor**

Avlite Systems has authorised distribution in many countries of the world. In each country, the authorised importing distributor has accepted the responsibility for warranty of products sold by distributor. Warranty service should normally be obtained from the importing distributor from whom you purchased your product. In the event of service required beyond the capability of the importer, Avlite Systems will fulfil the conditions of the warranty. Such product must be returned at the owner's expense to the Avlite Systems factory, together with a photocopy of the bill of sale for that product, a detailed description of the problem, and any information necessary for return shipment.

**Other Avlite Products Available**



**Solar Aviation Lighting**



**Helipad Lighting**



**Obstruction Lighting**



**Airfield Markers  
& Accessories**

**Typical Applications**

- Temporary & permanent airfield lighting
- Remote, emergency & defence airfield lighting
- Barricade, hazard & perimeter lighting
  - Helipad lighting
  - Obstruction lighting

For a complete list of product compliances including ICAO & FAA, please contact Avlite today



**Area & Sign Lighting**



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