User Manual

MicroMon Modbus User Manual

Welcome to the user guide to the MicroMon Modbus package. This guide will take you through the necessary steps to use the solution as efficiently as possible as well as being a useful reference guide to the software in future..

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MicroMon Modbus Solution

Users Manual

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Contents

Introduction

Welcome to the user guide to the MicroMon package. This guide will take you through the necessary steps to use the software as efficiently as possible as well as being a useful reference guide to the software in future. MicroMon is a world first plug and play data logger, that use IP based technologies to enable much easier integration with existing IT infrastructure and lower installation costs. MicroMon allows you to effectively monitor a whole range of possibilities.

Company Profile

Live Monitoring is a provider of real-time production and process monitoring systems. The business was founded in 2006 and the company headquarters are presently located in KwaZulu Natal. Live Monitoring develops market and support a totally independent line of monitoring software. The first product was designed primarily for the injection moulding and textile industries. However, through continued customer support and product innovation Live Monitoring has quickly developed a number of unique, flexible and cost-effective software solutions which broadened its product base to systems for all types of industries.

Corporate Mission Statement

About this user manual

This guide will take you through each step that you will need to take to effectively use MicroMon, from setting up the hardware to viewing data.

Package Contents *(may vary from images)*

1 X GSM modem 

1 X Serial Cable

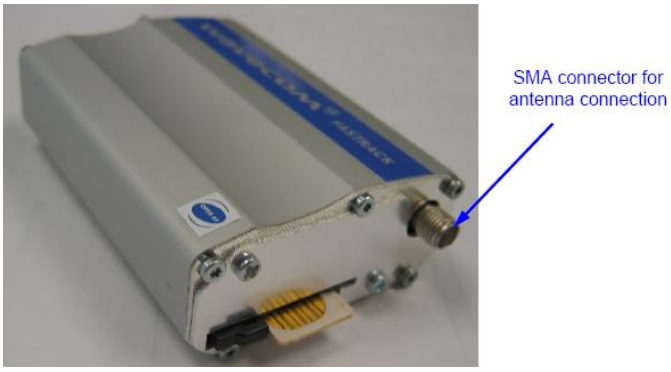
1 X GSM Antenna 

1 X Power Supply 

Optional :Serial configuration cable.

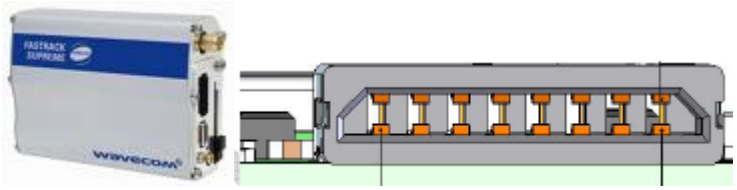
Setting Up

1.Connect the antenna to the SMA connector



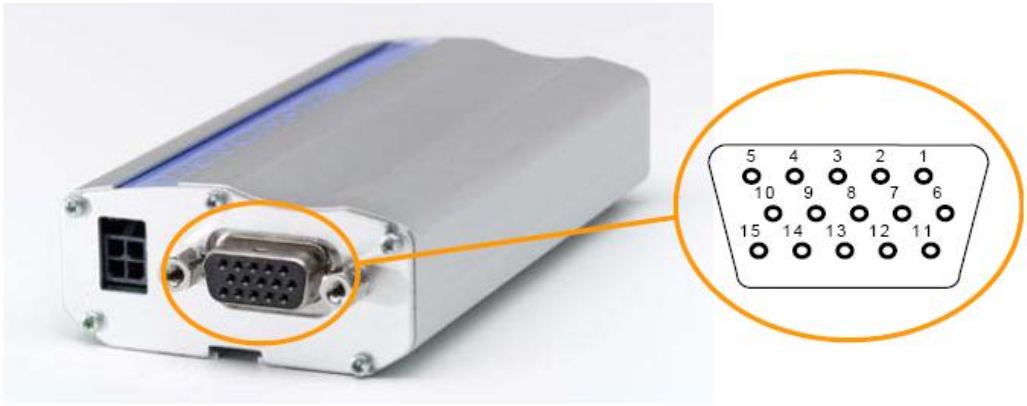
2.Connect the power adapter to the power connector.

3.Connect the serial Modbus cable to the 16 Pin connector


(16 Pin connector Diagram)

4.Connect the other side of Modbus cable to the Modbus serial port plug or connector .

4.If you need to change configuration settings then connect the configuration cable to the 15 Pin connector.



Starting Up

Power up the power adapter .You should see the LED next to the SIM slot light up then begin to flash. This indicates the system has booted and is connected to the GSM network. The system should within the *sendperiod* specified send data to the web page.

Using the web application:

Starting Up

If your computer is off turn it on and log in. Make sure you have an internet connection as this application works off the web

Signing On

1. Click 'START in the task bar (base of the screen). 

2. Select All Programs from the Start, pop-up menu.
3. Select Internet Explorer from the Programs sub-menu. 

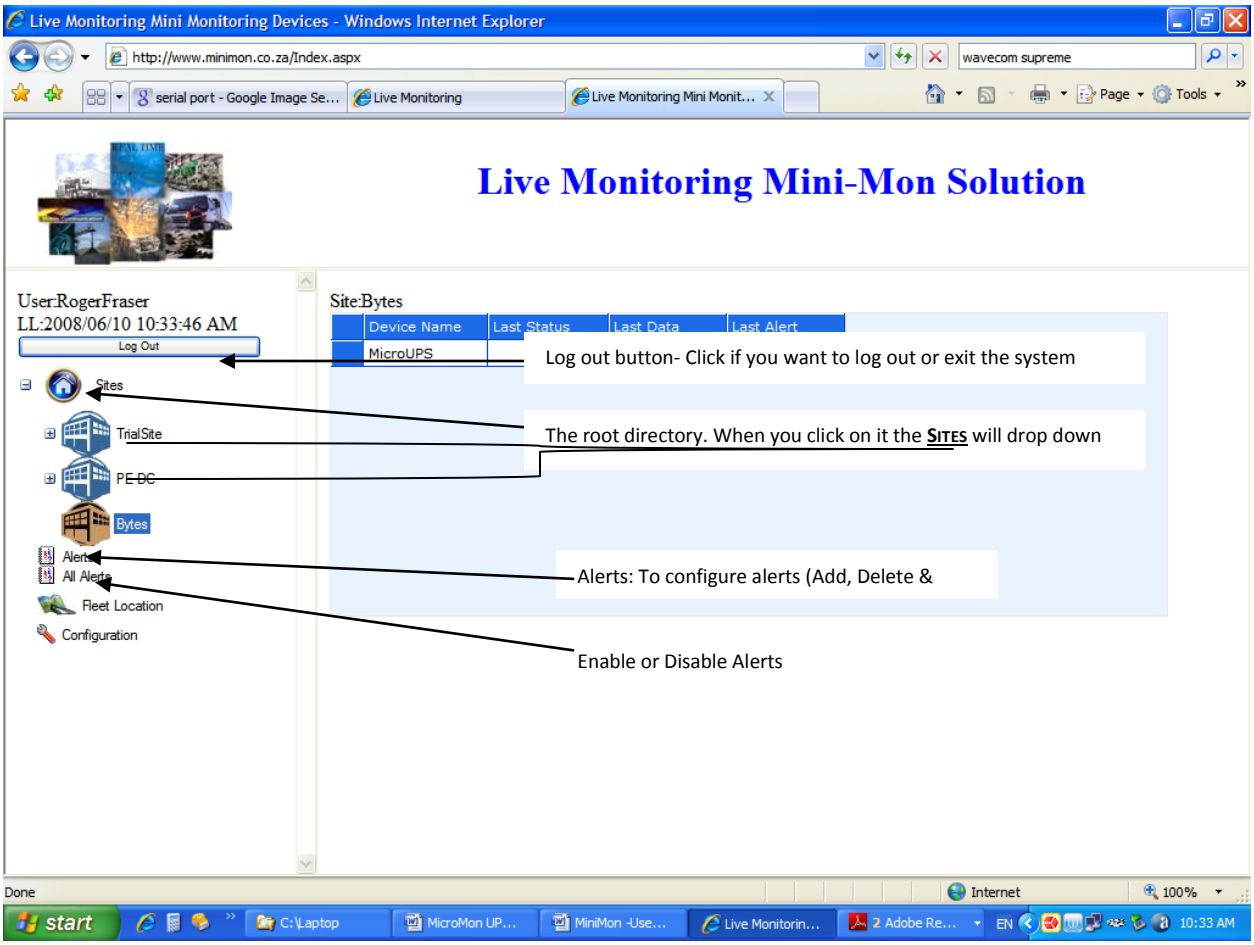
After the internet Explore is opened go to the address bar and type www.minimon.co.za then press Enter

Login Page:

The following screen will appear then you have to type your username and passwords supplied to you by Live Monitoring and click on Login or press Enter on your keyboard

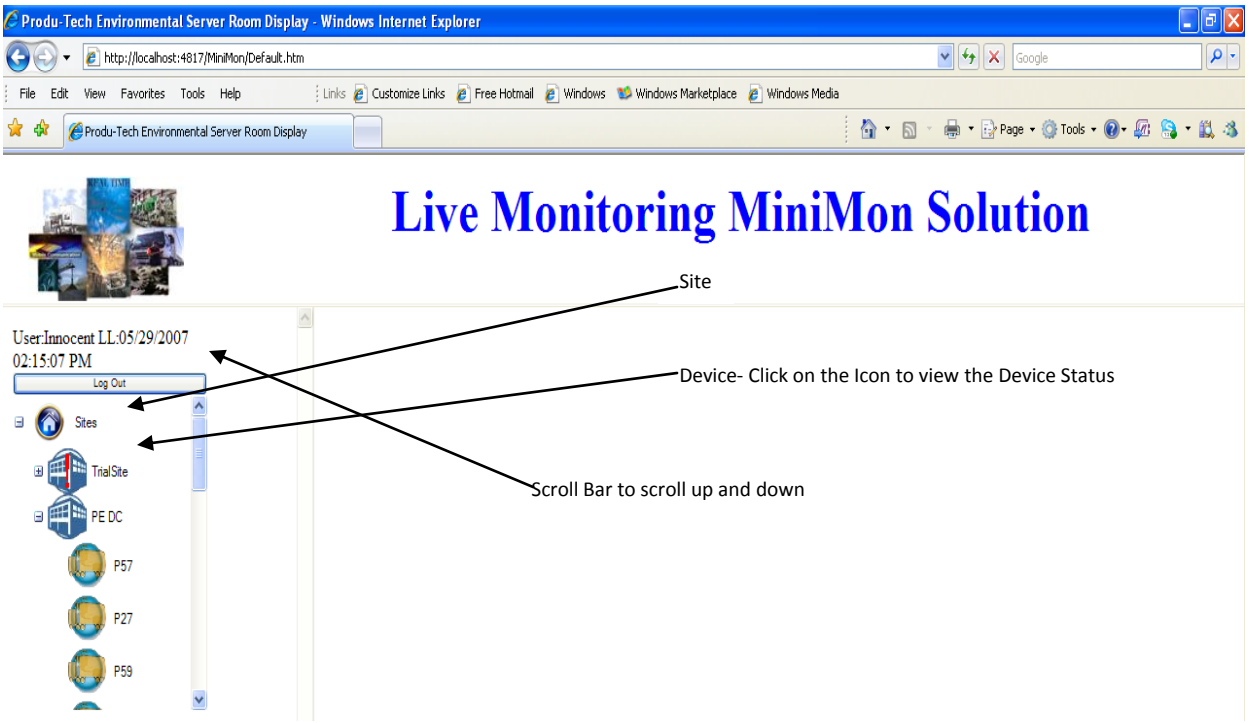
Main Page:

After successful login you will be taken to the following page:



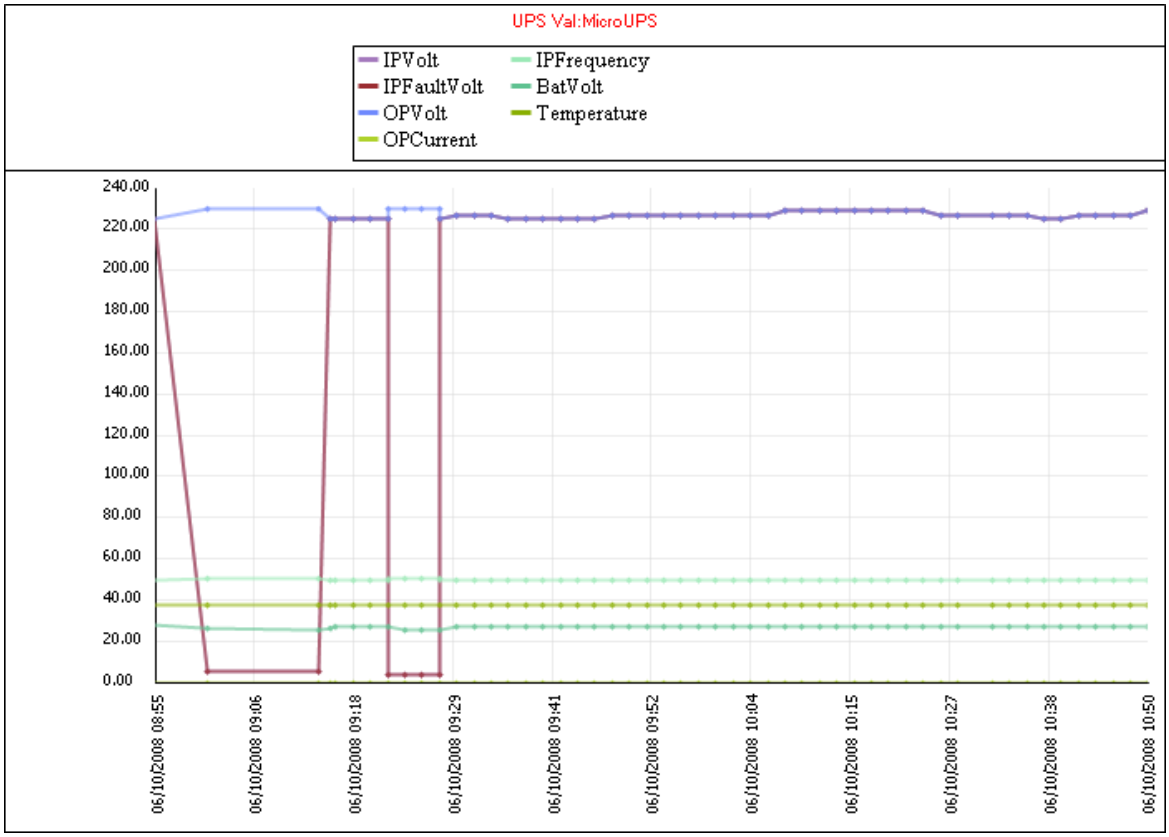
As illustrated on the figure above the first button is the Logout button that you will Click when you have finished using the system.

The next on being the Site that when clicked will produce a drop down of all the sites under that directory. You will be required to click on your corresponding site to get a drop down of all the Devices.


Produ-Tech Environmental Server Room Display - Windows Internet Explorer
http://localhost:4817/MiniMon/Default.htm
Produ-Tech Environmental Server Room Display
Live Monitoring MiniMon Solution
Site
User:Innocent LL:05/29/2007
02:15:07 PM
Log Out
Sites
TrialSite
PE DC
P57
P27
P59
Device- Click on the Icon to view the Device Status
Scroll Bar to scroll up and down

Device Status Page:

On clicking the Device icon the following Page will appear.

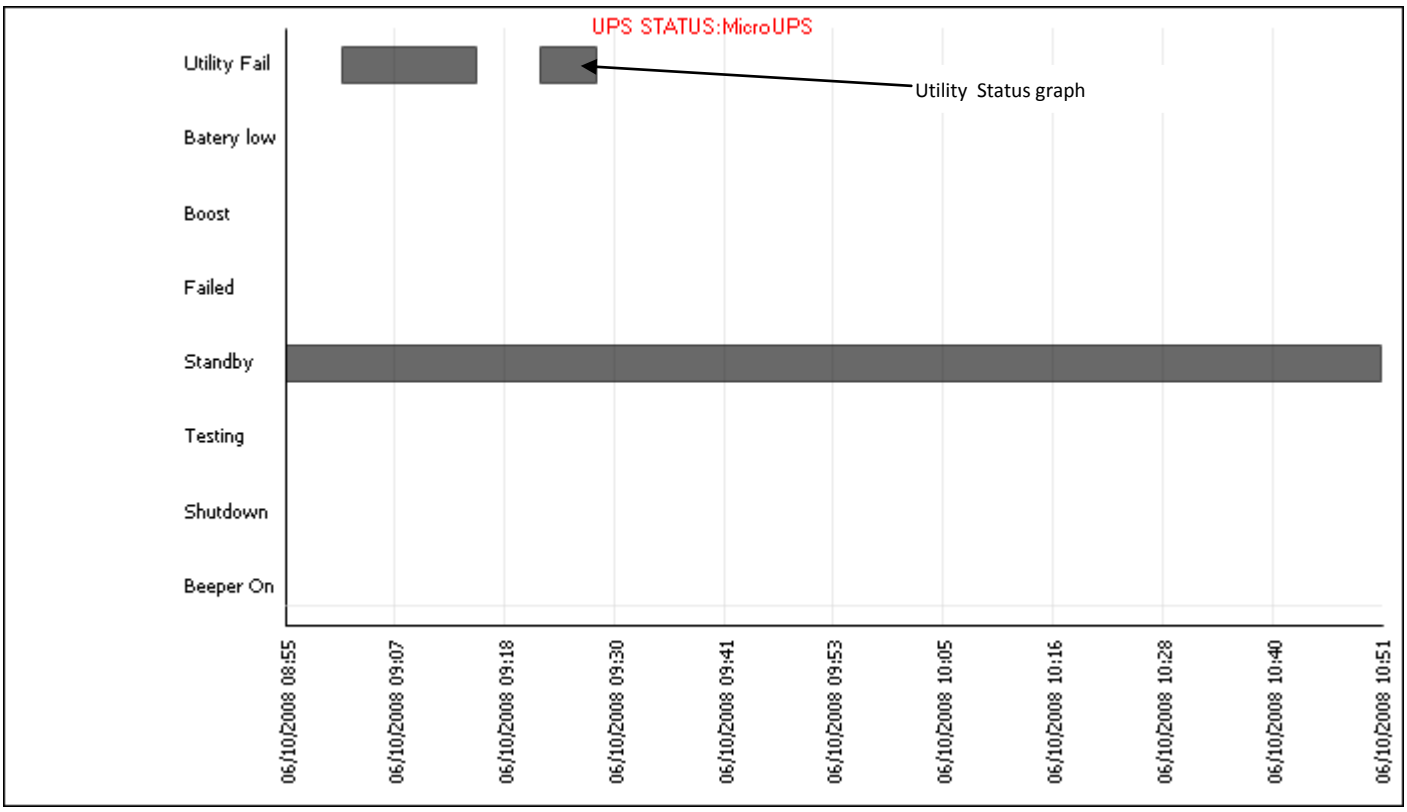


Values Graph:

There are a number of values collected periodically from the UPS. If you move mouse over on the dots the system will display the value on that point. The Y axis will show you the value while the X axis shows the time.

Status:

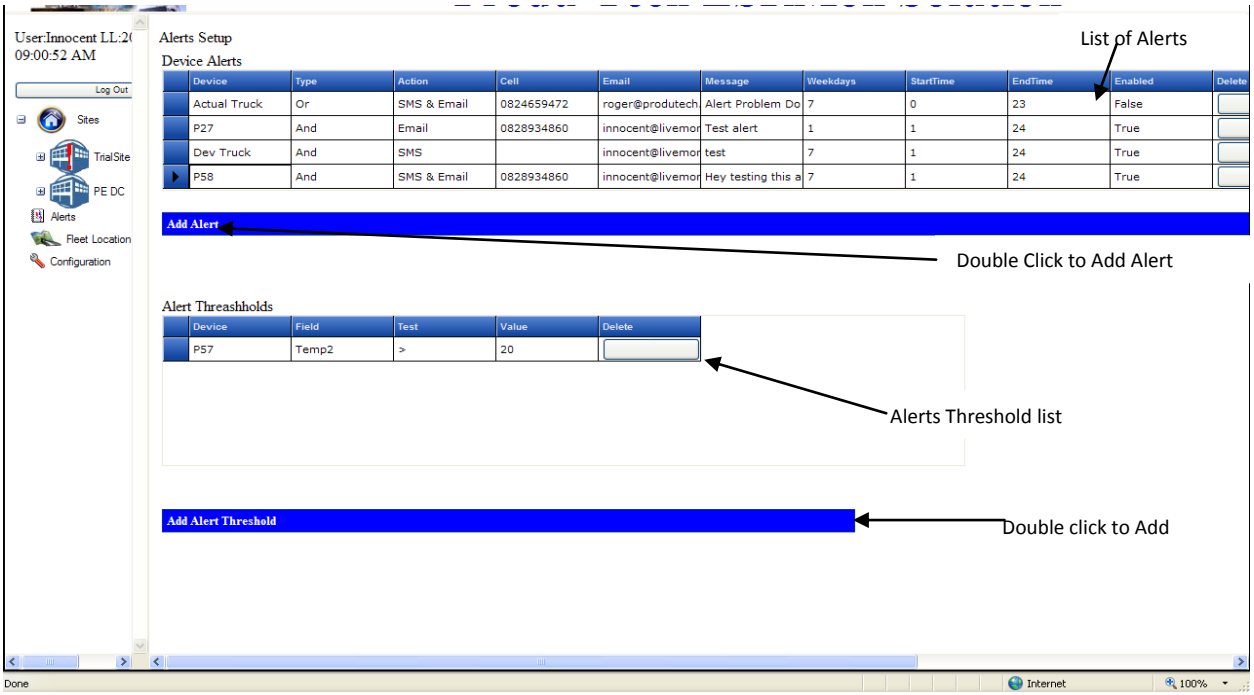
The status will indicate when the stutus changed as illustrated on the graph below.



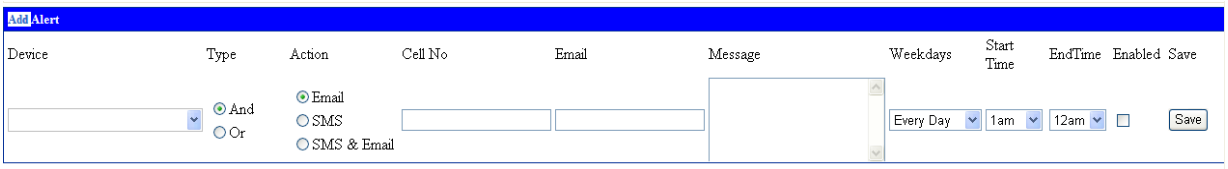
Alerts:

This page will display the all Alerts, give you option to Delete or Edit the Alert and also to Add Alerts on the system.

These pages also have the facility for you to Add Alert Threshold and display them in a list.



Add Alert Menu:

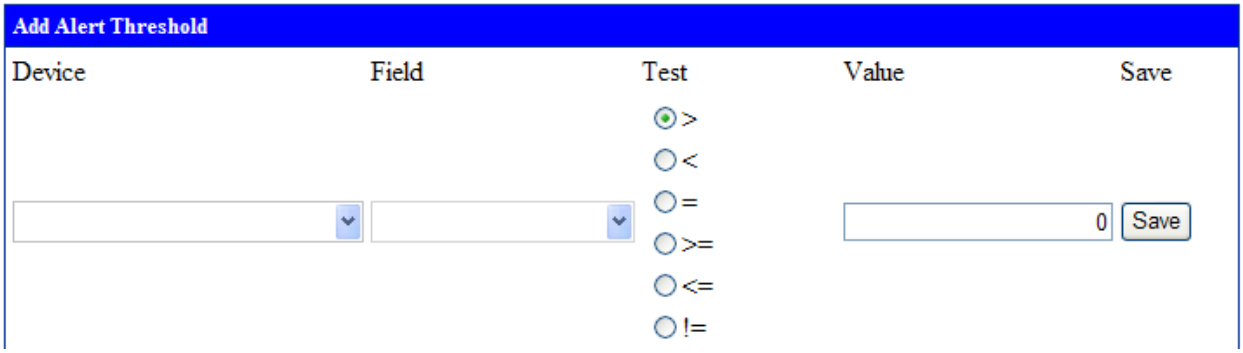


You will need to select a device / Trailer you want to add an alert on, Select Type of alert that you need to have AND for accessing both contacts OR for accessing either of them.

Action is how you want your Alert to send the information it could be either by SMS, EMAIL or EMAIL & SMS. Under CELL NUMBER field you will be required to enter cell number of the people that are supposed to receive the SMS and also on the EMAIL the email address of the recipient.

Under message you will type the SMS or EMAIL message, on Week days you will select the days on which the alert should run and specify the Start time and End time of the alert. Lastly Enable the alert so it can be active then Click Save.

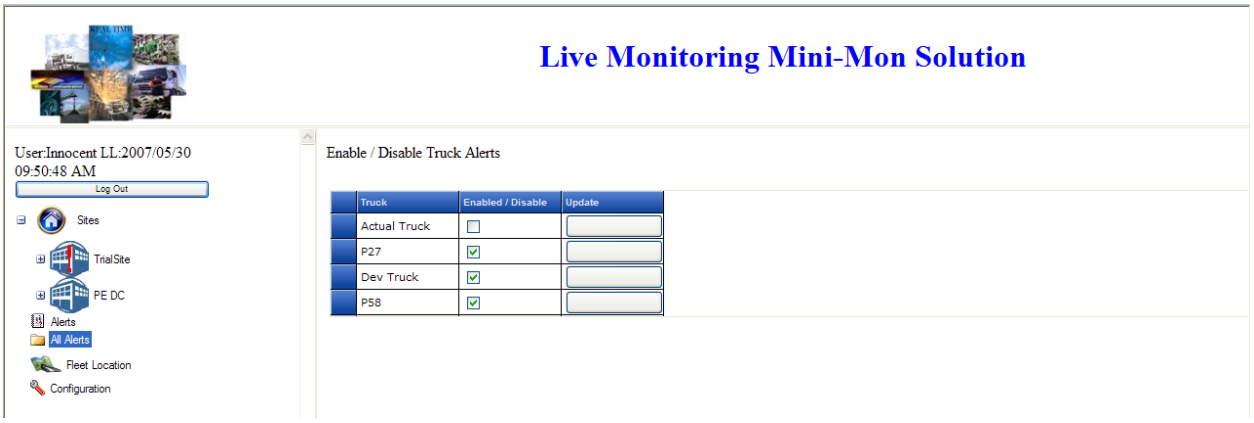
Add Alert Threshold:



Firstly before you click on this menu you will need to select the Alert that you want to add a threshold from the Alerts List

Then you can select a Device/ Trailer that you want to Add a Threshold, Select the Filed which stands the contacts that you need tested, Select Test, and enter a value to test against then Click Save.

All Alert Page:



This page list all the Alert and allows you to Enable or Disable them this maybe happen in case the device is undergoing maintenance for sometime. After checking (Enable) or un-checking (Disable) you can click on any button under update and the system will update the database to set the alert to be Active or inactive

View data on the Mobile phone

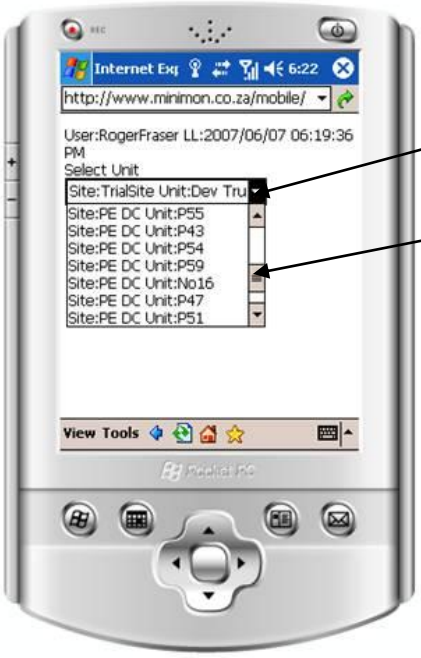
NB. You need to have a cellphone that has a capability to connect to the internet to be able to use this feature of the system. If you are not sure whether your handset connects to the internet you can speak to your Service Provider or hand set manufacture.

Bellow is some screen shots of the mobile phone web interface.

You will need to go to the web browser of your mobile phone, Select address then type www.minimon.co.za then press Enter. The following screen will appear then you will type your User Name and a Password provided to you by Live Monitoring staff then click Login.

NB User name and passwords are case sensitive

After clicking Login the following screen will appear and then you can click on the down arrow to see the list of Trucks and select the one you need to vie the status off. You can use the scroll bar to scroll up and down to see the desired truck.



Drop Down

Scroll Bar

After selecting the truck you require please click on View Status and wait for a few seconds.

A page will load that looks like the following screen.

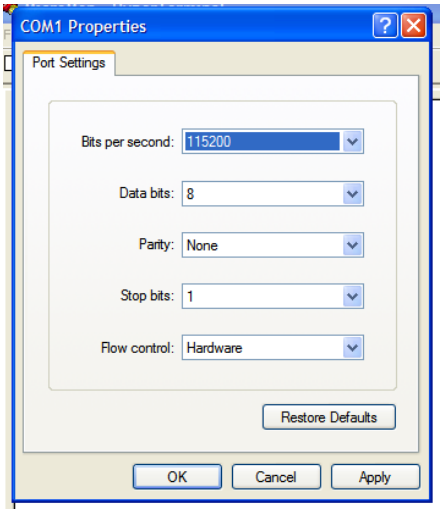
The information displayed on this page will be Date, Values & Status of the Device. You will need to scroll down to see al the info.

If you need to see other device status you will repeat the step above and select a different device

Using Hyperterminal to configuration the application

Ensure that the configuration cable is connected to the PC com port.Start the hyperterminal program on your PC.Select the com port the cable is connected to.

Select the standard port settings 115200/N/8/1 Hardware:



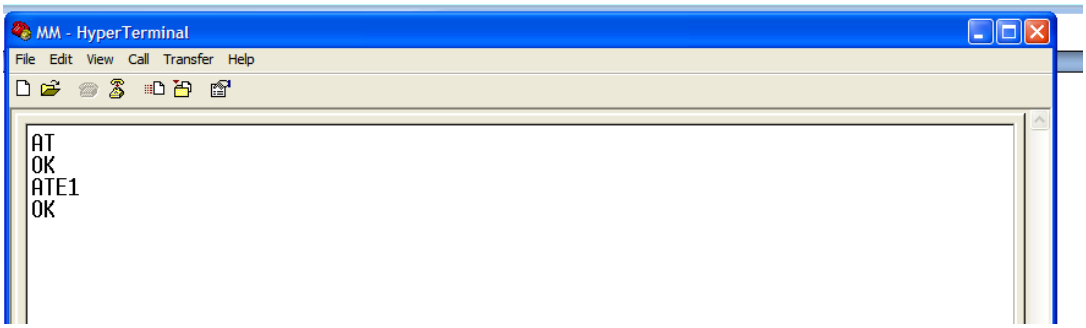
Choose OK.

Type AT press enter key.

The modem should respond with OK. The terminal may or may not echo the typed characters .

If you don't receive OK then check the cables and that the modem is on and the LED is on/Flashing.

If you don't get the characters echoed and you want them type ATE1 and press enter.You should receive OK then any characters typed get echoed by the modem.



General:

To get the current value of a command type the command followed by ?

To set the current value of a command type the command then followed by = and the value .Text values need to be enclosed with double quotations i.e. "value" .

Configuration Comands:

AT+IPADRES("192.168.0.1")

Gets or sets the IP-Address of the receiving server. This is the address data is sent to. After changing reset the unit using AT+CFUN=1 or power cycle the unit.

AT+IPPORT (1214)

Gets or sets the IPPort of the receiving server. This is the port data is sent to. After changing reset the unit using AT+CFUN=1 or power cycle the unit.

AT+SENDPERIOD (300)

Gets or sets how often data is sent to the serve in seconds.

AT+APNUNAME (“JohnDoe”)

Gets or sets the APN User Name. After changing reset the unit using AT+CFUN=1 or power cycle the unit.

AT+APNPASS (“password”)

Gets or sets the APN User Password. After changing reset the unit using AT+CFUN=1 or power cycle the unit.

AT+APNNAME (“internet”)

Gets or sets the APN Name to use. After changing reset the unit using AT+CFUN=1 or power cycle the unit.

AT+UARTBAUD (9600)

Gets or sets the second serial uart baud rate requires restart.

AT+MBSETTING (“0,1,0,6”)

Gets or sets the modbus data read in by the device. The parameters are :

<Setting Number> 0-10

<Module ID> 1-255

<Start Register> 0-10000

<Num Registers>0-16 (0 Disables)

AT+MMDEBUG(“True”\”False”)

Gets or sets to output debug info to configuration terminal (not saved reverts to false at reboot).

When complete reset the unit if required.