



**SETUP & OPERATING MANUAL**

**SNMP ALARM MODULE**  
**FOR RADIAN SERIES TPCM, TPCMQ & TPCP**  
**RACK UNITS**

**[WWW.UNIPOWERTELECOM.COM](http://WWW.UNIPOWERTELECOM.COM)**

Manual No. snmp\_alarm\_module-1  
09/23/08 snmp\_alarm\_module-man

© 2008 UNIPOWER Corp.  
All Rights Reserved

**UNIPOWER Corporation**

NORTH AMERICA • 3900 Coral Ridge Drive, Coral Springs, Florida 33065, USA • Tel: +1 954-346-2442 • Fax: +1 954-340-7901 • sales@unipower-corp.com  
EUROPE • Parkland Business Centre, Chartwell Road, Lancing BN15 8UE, ENGLAND • Tel: +44(0)1903 768200 • Fax: +44(0)1903 764540 • info@unipower-europe.com

## Contents

<b>INTRODUCTION .....</b>	<b>3</b>
<b>INITIAL SET UP.....</b>	<b>3</b>
<b>WEB PAGES.....</b>	<b>4</b>
INITIAL LOG ON.....	4
HOME PAGE .....	5
CONFIGURATION – NETWORK – IP SETTINGS .....	6
CONFIGURATION – NETWORK – NETWORK SERVICES SETTINGS .....	7
CONFIGURATION – NETWORK – ADVANCED NETWORK SETTINGS .....	8
CONFIGURATION - ALARMS CONFIGURATION .....	9
CONFIGURATION – SYSTEM - SYSTEM CONFIGURATION.....	11
CONFIGURATION – SYSTEM - SYSTEM CONFIGURATION.....	12
CONFIGURATION – USERS.....	13
MANAGEMENT – CONNECTIONS .....	14
ADMINISTRATION – UPDATE FIRMWARE .....	15
ADMINISTRATION – FACTORY DEFAULT SETTINGS .....	16
ADMINISTRATION – SYSTEM INFORMATION - GENERAL .....	17
ADMINISTRATION – SYSTEM INFORMATION – GPIO.....	18
ADMINISTRATION – SYSTEM INFORMATION – SERIAL .....	19
ADMINISTRATION – SYSTEM INFORMATION – NETWORK .....	20
ADMINISTRATION – REBOOT .....	21
LOG OUT.....	22
<b>FURTHER SNMP INFORMATION.....</b>	<b>23</b>

## Introduction

This manual details the available functions of the Unipower SNMP module. The primary purpose of this module is to provide SNMP traps when an alarm condition occurs so that a remote monitoring station can be alerted. The module may also be set up to provide alert e-mails. SNMP monitoring is best achieved by using third party management software such as HP Open view. Setting up such software is beyond the scope of this manual.

## Initial set up

The module is intended to be connected to a local area network using ethernet. The module provides an RJ-45 socket for this purpose.

To assist in setting up the module initially, it is suggested that a crossover cable is used to connect directly between the module and a computer.

The module is initially set with the following network settings:

IP address: 192.168.0.200  
Subnet mask: 255.255.255.0  
Gateway: 0.0.0.0

A computer initially connected to the module must have its IP address set in the range 192.168.0.x where x is 1 to 255 (not 200 though). The computers subnet mask must be set to 255.255.255.0.

It should then be possible to log in to the module using internet explorer or another web browser.

The rectifier shelf system should be powered up with the SNMP module connected to the 25-way connector on the rear of the shelf. You should see the yellow and green lights on the SNMP module flash a few times as it boots up.

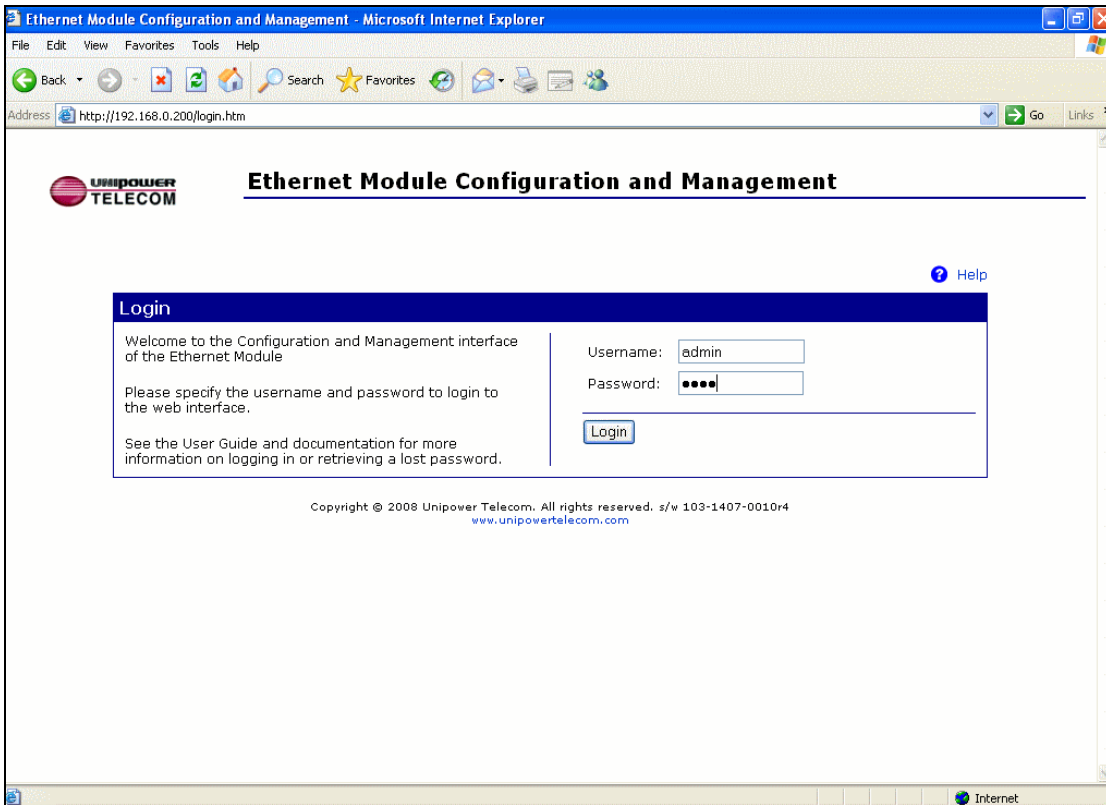
To connect to the module, simply type the following into the browsers address bar:

<http://192.168.0.200>

The log in web page should appear. If it does not, please recheck your computer network settings and ensure that a crossover cable is used for direct connection.

# Web pages

## Initial log on



**Figure 1**

Type the following into the boxes as shown in figure 1 to log on:

Username: admin

Password: 1234

Press the Login button.

## Home page

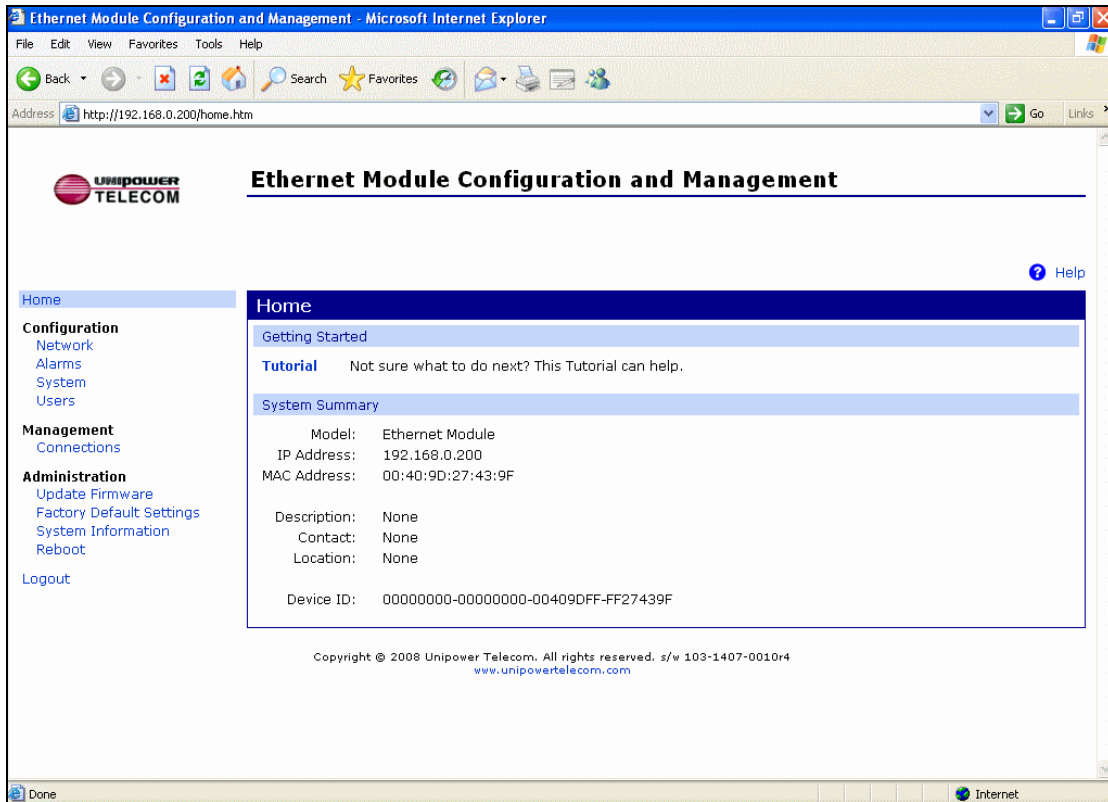


Figure 2

After successfully logging in, the module home page will be displayed. A menu is provided down the left hand side which allows access to various module set up features.

The home page displays some basic information about the adaptor including a description, contact details and location.

The tutorial link should not be used as it contains details of features not available in this module configuration.

## Configuration – Network – IP Settings

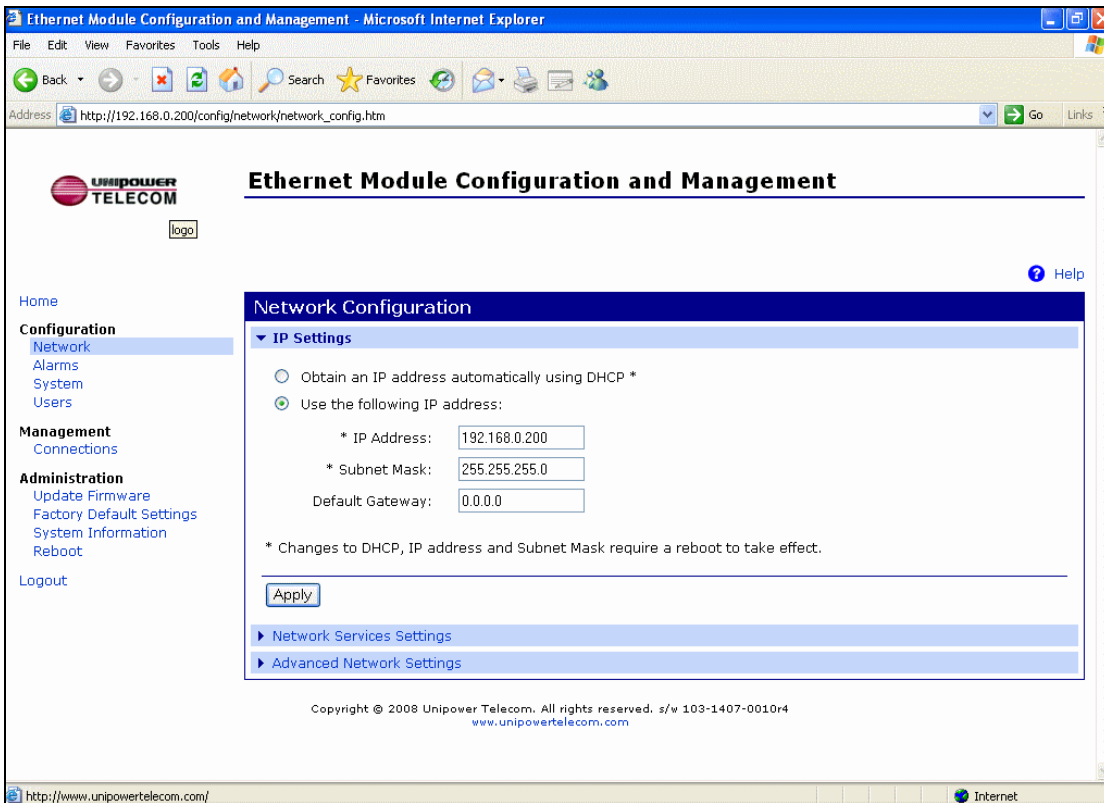


Figure 3

The network configuration screen allows adjustment of basic network parameters (IP address, subnet mask and gateway). It will also allow the module to be configured to use DHCP. A reboot will be necessary after changing any of these parameters. Remember to redirect your browser to the new address and reconfigure the connecting computer if necessary.

## Configuration – Network – Network Services Settings

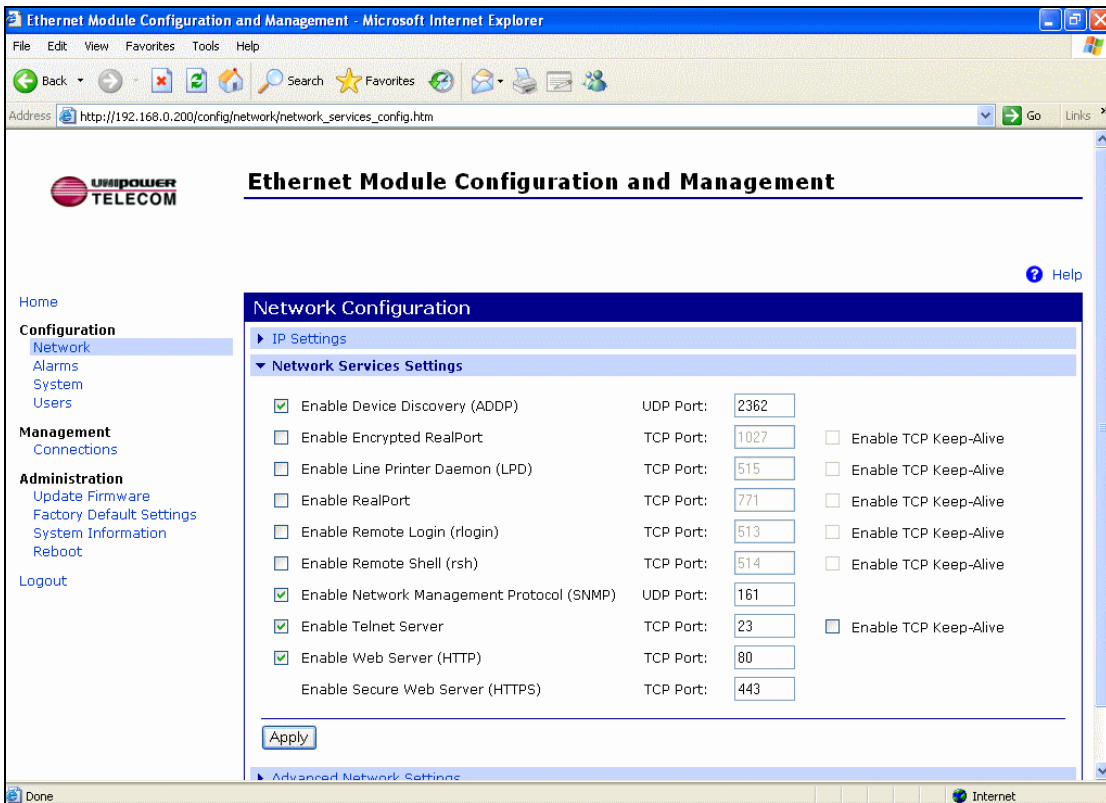


Figure 4

The network service settings allow some of the network features to be enabled or disabled. It is recommended to only enable the following since other features are not supported by this module:

- ADDP Device discovery
- Network management protocol (SNMP)
- Telnet server
- Web server (HTTP)

## Configuration – Network – Advanced Network Settings

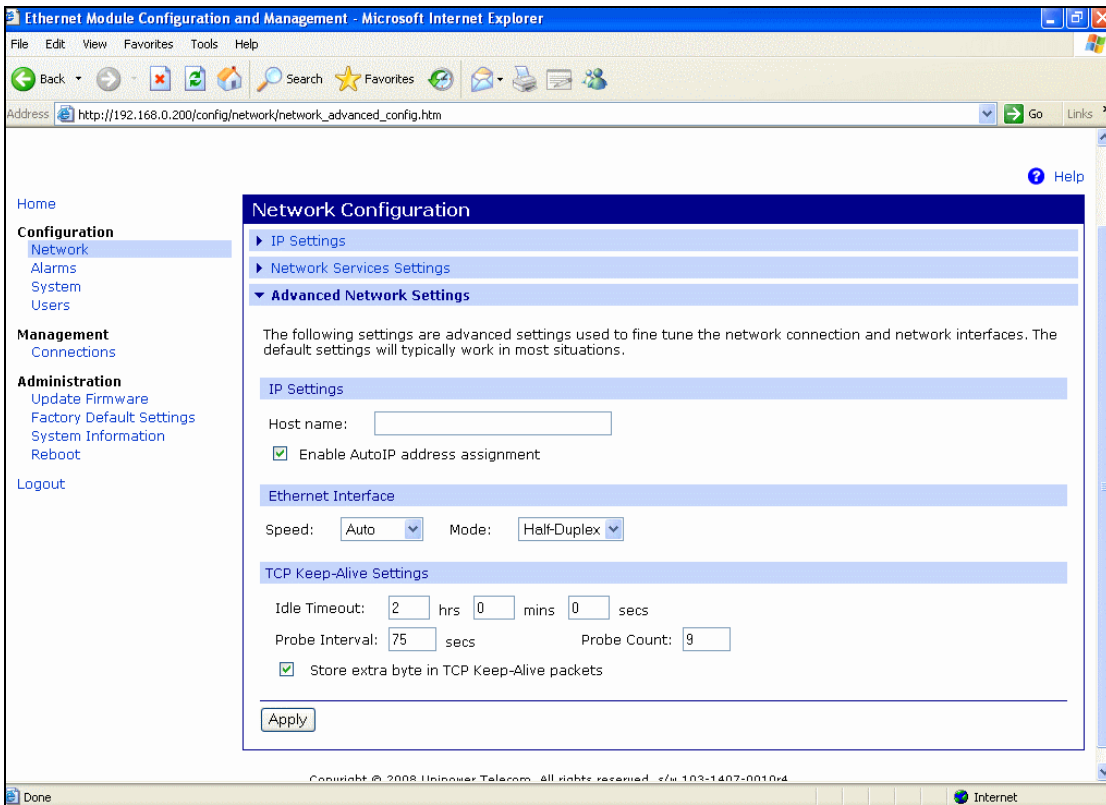


Figure 5

The advanced network settings allow more precise adjustment of network parameters. It is recommended that only advanced users adjust these parameters.

## Configuration - Alarms Configuration

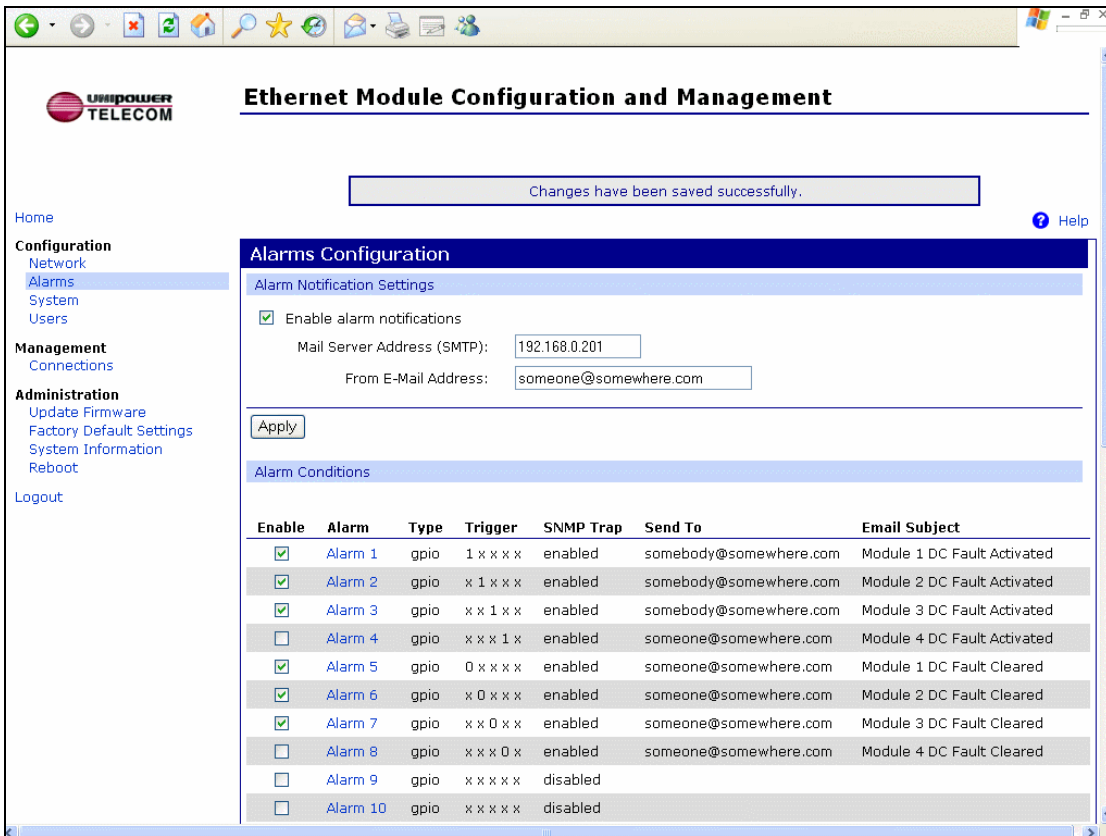


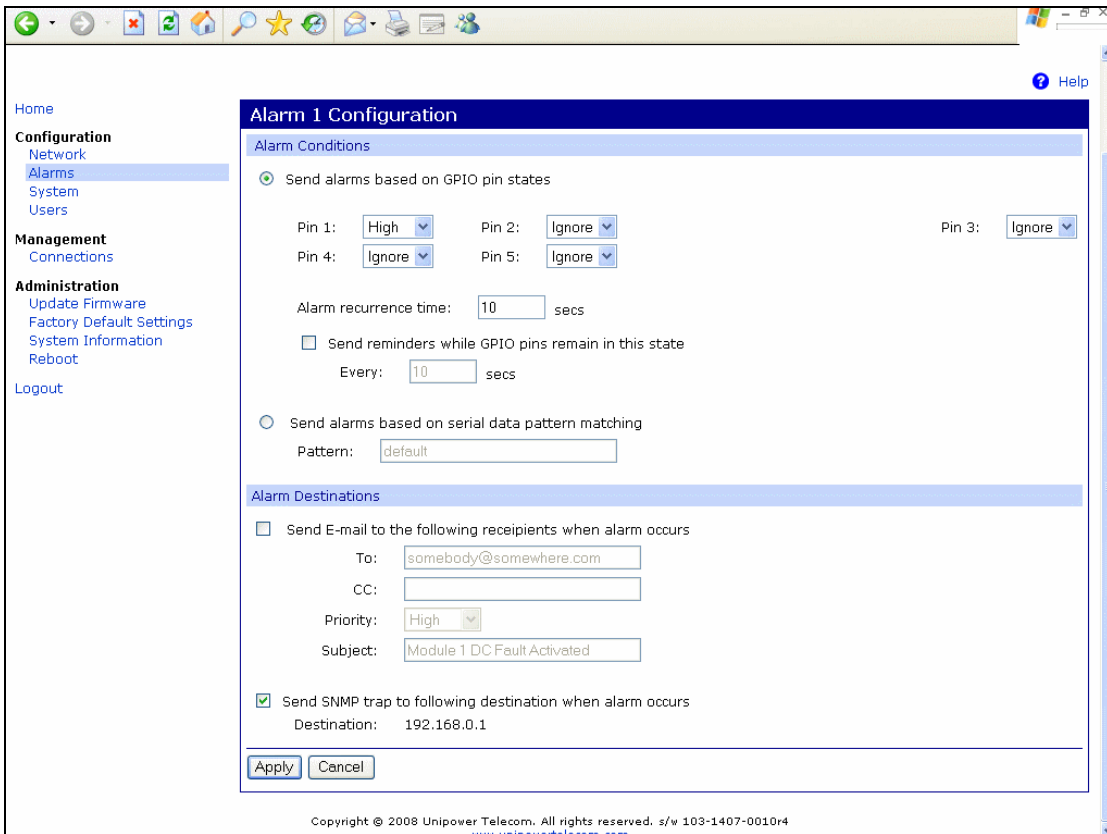
Figure 6

The alarms configuration page shows some preset alarm conditions so that any failing power supply module will provide an alarm output. Alarm outputs will also be generated when faults are cleared. The check box at the top must always be checked as otherwise no alarm outputs will be generated from either SNMP or e-mail.

For the e-mail service, the mail server IP address must be entered into the relevant box. This box will only accept an IP address in numerical format.

Most mail servers will require a 'from' e-mail address before they will accept outgoing mail. This address must be entered in the box. This address must be valid on the mail server. Don't forget to press Apply after making changes.

To alter the e-mail address that alarms are sent to and to setup other parameters, click on the blue text in the second column of the alarm table. For each alarm a screen similar to that shown in figure 7 will appear.



**Figure 7**

The GPIO pin state combo boxes should not be altered as this will affect how the module creates alarms. If reminders at regular intervals are required for a continuing alarm condition, then this can be enabled using the check box. The repeat time in seconds can then be entered into the box.

If an e-mail is required to be sent for this condition, then the check box must be checked next to ‘Send E-mail to the following recipients when alarm occurs’.

The text boxes can then be filled in with the relevant details.

Note that the e-mail subject is also used when SNMP traps are sent.

To enable an SNMP trap to be sent, make sure the check box is checked for that option.

Please press Apply when all changes are complete.

## Configuration – System - System Configuration

**Unipower TELECOM**

### Ethernet Module Configuration and Management

Help

Home

**Configuration**  
Network  
Alarms  
System  
Users

**Management**  
Connections

**Administration**  
Update Firmware  
Factory Default Settings  
System Information  
Reboot

Logout

#### System Configuration

**Device Identity Settings**

Description:

Contact:

Location:

Apply

**Simple Network Management Protocol (SNMP) Settings**

Copyright © 2008 Unipower Telecom. All rights reserved. s/w 103-1407-0010r4  
www.unipowertelecom.com

**Figure 8**

This web page allows the user to enter some information about the site. This information is present on the home page and can also be accessed when using SNMP.

## Configuration – System - System Configuration

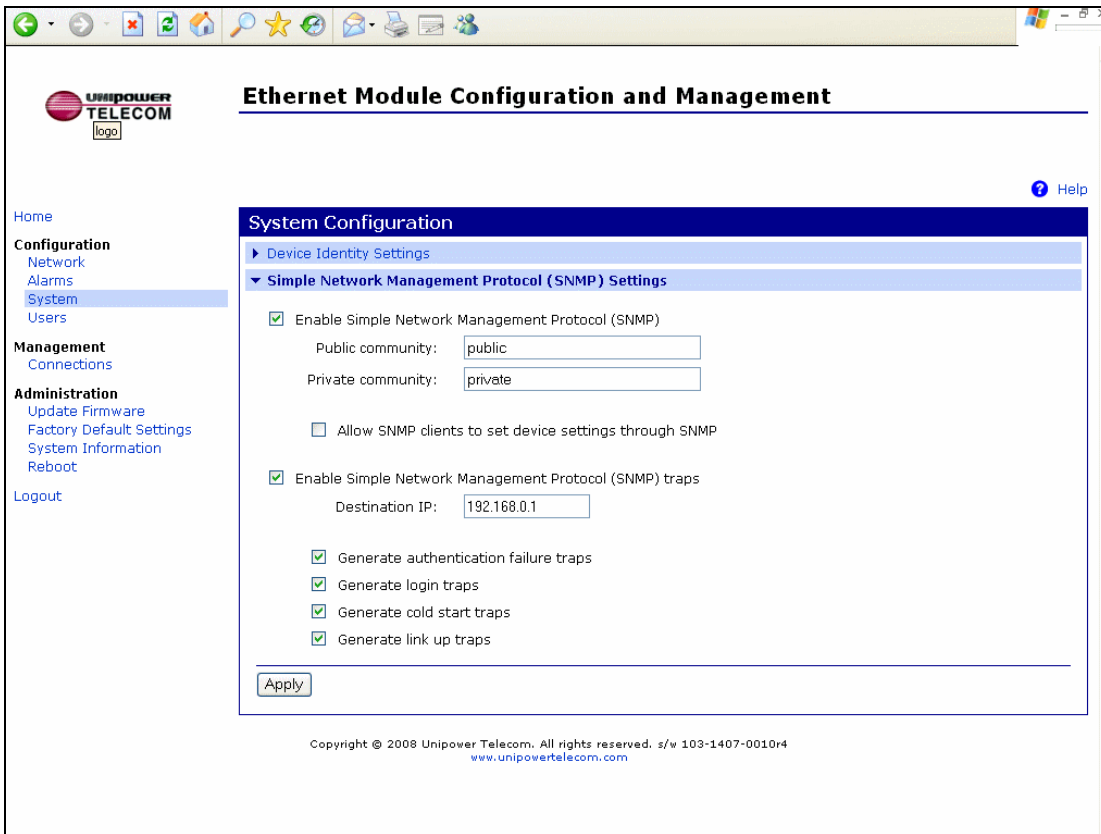


Figure 9

This web page allows the user to set up the SNMP. The community strings and trap destination can be set. Additional traps can be configured to be sent if desired by checking the relevant boxes.

Please press Apply when changes have been completed.

## Configuration – Users

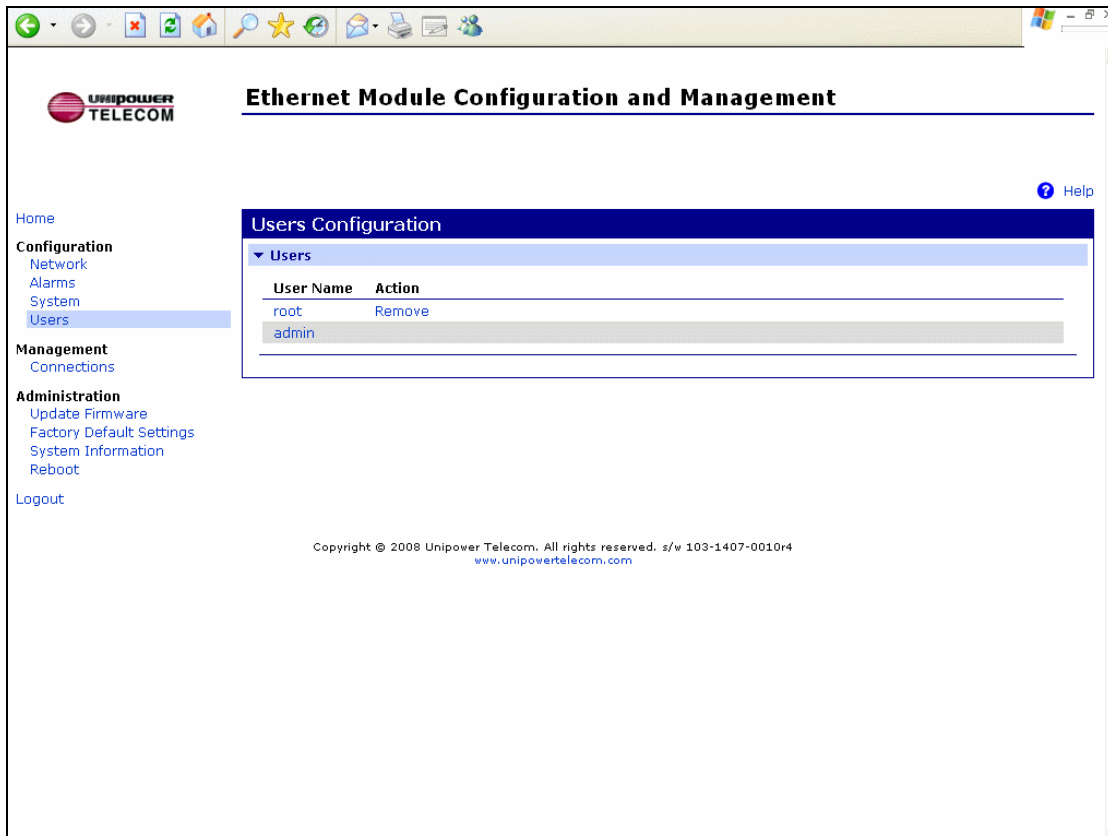


Figure 10

This page displays the possible user log in names. The root user should not be removed as it may be required for factory configuration.

It is not recommended to change any admin user settings as access to some of the menus may become impossible.

# Management – Connections

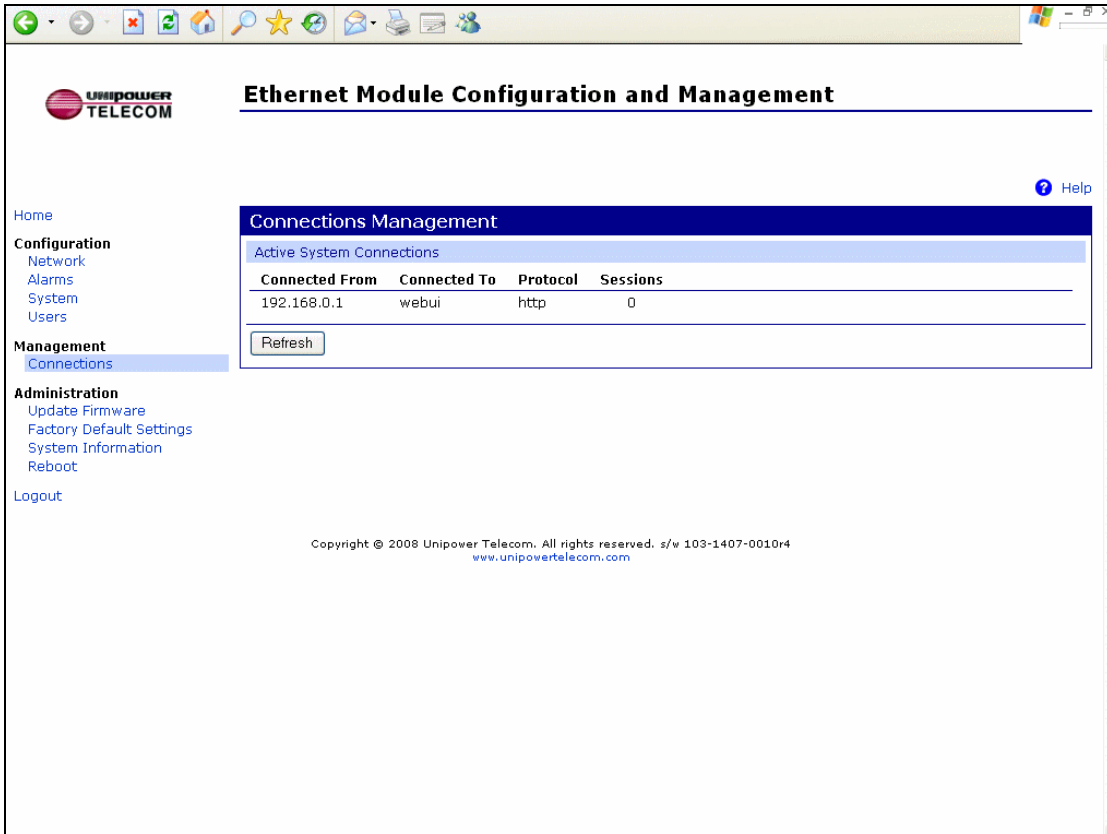


Figure 11

This page shows any active connections. No changes are possible on this screen.

## Administration – Update Firmware

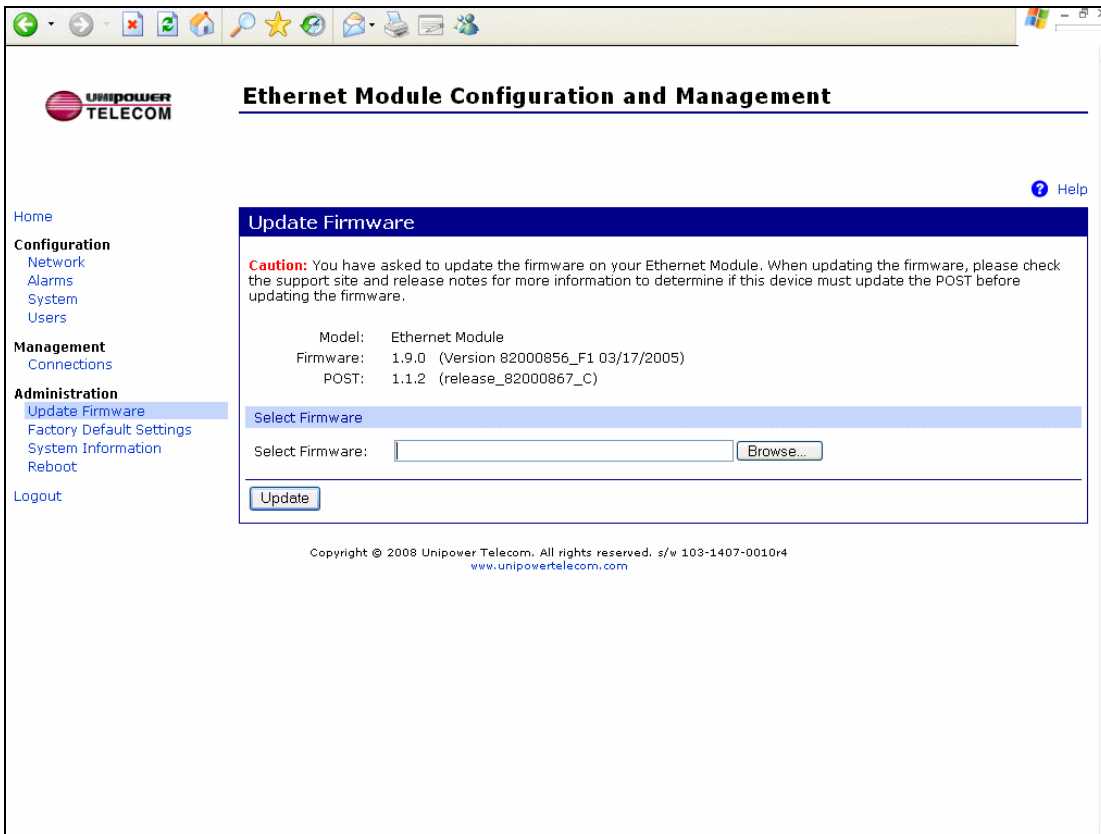


Figure 12

This page allows the updating of the core module firmware. It is not recommended to do this unless it has been advised by Unipower. If so then the necessary files will be provided.

## Administration – Factory Default Settings

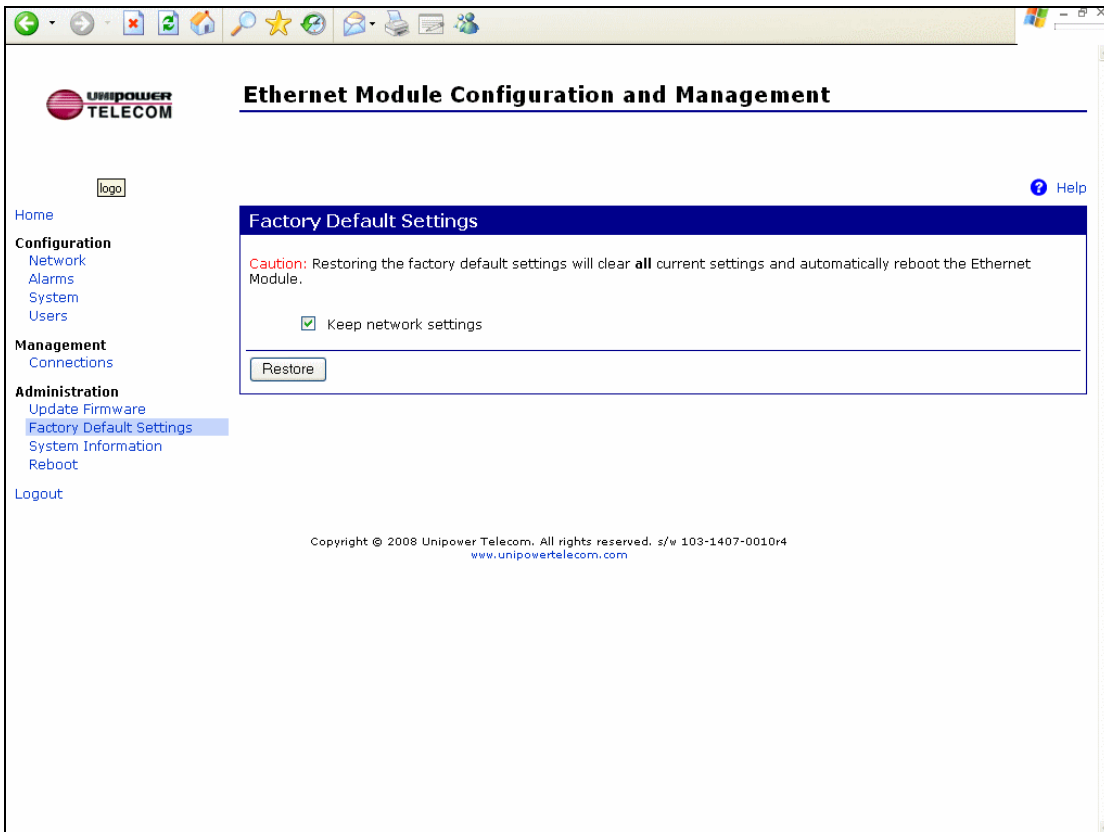


Figure 13

This page allows the user to revert to the default settings of the module as supplied by Unipower.

## Administration – System Information - General

The screenshot displays the 'Ethernet Module Configuration and Management' web interface. The page title is 'Ethernet Module Configuration and Management'. The Unipower TELECOM logo is in the top left. A navigation menu on the left includes: Home, Configuration (Network, Alarms, System, Users), Management (Connections), Administration (Update Firmware, Factory Default Settings, System Information, Reboot), and Logout. The 'System Information' section is expanded to show 'General' details:

Model:	Ethernet Module
MAC Address:	00:40:9D:27:43:9F
Firmware Version:	1.9.0 (Version 82000856_F1 03/17/2005)
Boot Version:	0.0.0.1 (release_82000866_C)
POST Version:	1.1.2 (release_82000867_C)
CPU Utilization:	57%
Up Time:	18 minutes 41 seconds
Total Memory:	8192 KB
Used Memory:	5431 KB
Free Memory:	2760 KB

Below the table is a 'Refresh' button and three expandable sections: GPIO, Serial, and Network. At the bottom, the copyright notice reads: 'Copyright © 2008 Unipower Telecom. All rights reserved. s/w 103-1407-0010r4 www.unipowertelecom.com'.

Figure 14

This web page shows basic information about the module system.

## Administration – System Information – GPIO

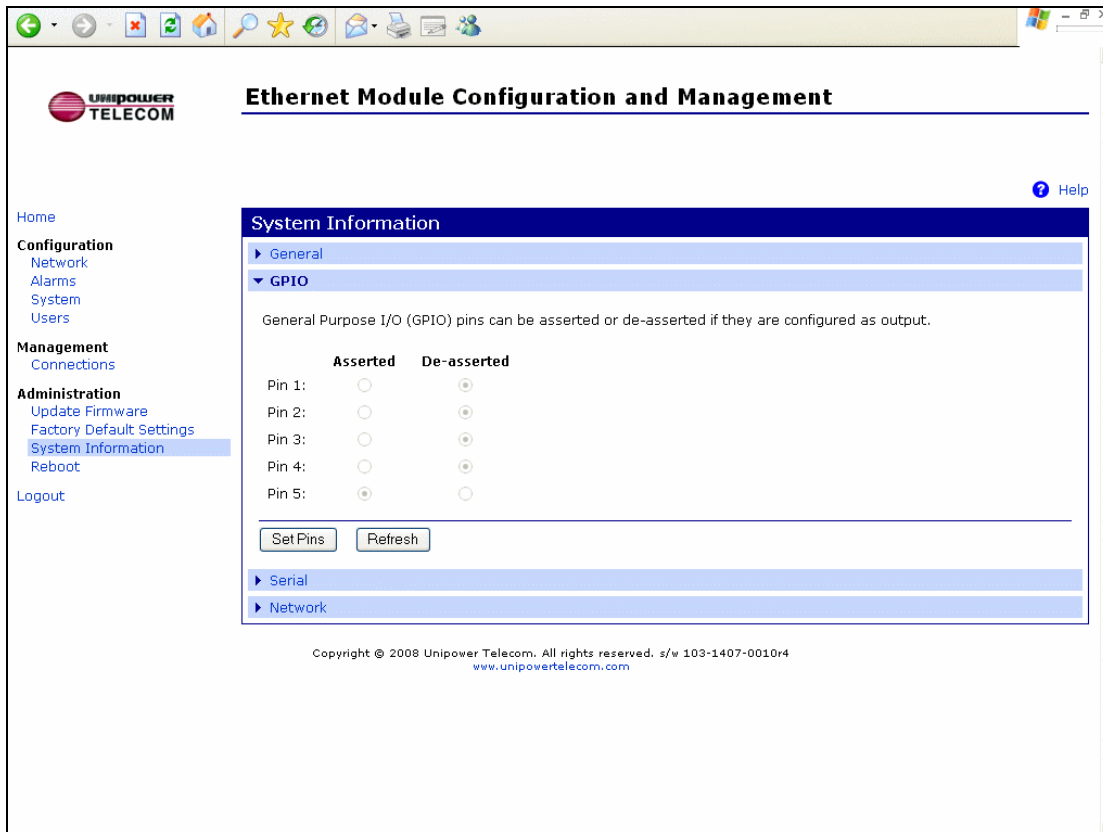


Figure 15

The GPIO page shows the state of the monitored inputs. Each pin corresponds to a DCOK signal from a power supply module. In TPCP/TPCM and similar products where three power modules are monitored, then the first three pins will be used for modules 1 to 3 as viewed from the front of the shelf. When a module is working correctly, the pin will show as De-asserted. For modules that are faulty or are not present, the pin will show as Asserted.

## Administration – System Information – Serial

**Ethernet Module Configuration and Management**

Home

**Configuration**  
Network  
Alarms  
System  
Users

**Management**  
Connections

**Administration**  
Update Firmware  
Factory Default Settings  
System Information  
Reboot

Logout

**System Information**

- ▶ General
- ▶ GPIO
- ▼ Serial
- ▶ Network

Port	Description	Profile	Serial Configuration
Port 1	None	<Unassigned>	9600 8N1

Copyright © 2008 Unipower Telecom. All rights reserved. s/w 103-1407-0010r4  
[www.unipowertelecom.com](http://www.unipowertelecom.com)

Figure 16

This page shows the status of the serial port within the module. This port is not available for external use and no changes should be made.

## Administration – System Information – Network

The screenshot shows a web interface for 'System Information' under the 'Network' category. The left sidebar contains navigation links for Home, Configuration (Network, Alarms, System, Users), Management (Connections), and Administration (Update Firmware, Factory Default Settings, System Information, Reboot, Logout). The main content area is titled 'System Information' and includes a 'Network' section with a description: 'The following information and statistics can be used to manage and monitor your network connections and interfaces. This information may also be helpful in troubleshooting problems with the network.' Below this are four tables of statistics: IP, TCP, UDP, and ICMP. A 'Refresh' button is located at the bottom of the statistics section. The footer of the page reads 'Copyright © 2008 Unipower Telecom. All rights reserved. s/w 103-1407-0010r4 www.unipowertelecom.com'.

IP Statistics			
Datagrams Received:	332	Datagrams Forwarded:	0
Forwarding:	0	No Routes:	0
Routing Discards:	0	Default Time-To-Live:	60

TCP Statistics			
Segments Received:	307	Segments Sent:	372
Active Opens:	1	Passive Opens:	5
Bad Segments Received:	0	Attempt Fails:	0
Segments Retransmitted:	0	Established Resets:	0
Currently Established:	3	Resets Sent:	0

UDP Statistics			
Datagrams Received:	24	Datagrams Sent:	2
Bad Datagrams Received:	0	No Ports:	24

ICMP Statistics			
Messages Received:	2	Bad Messages Received:	0
Dest. Unreachable Messages Received:	2	Messages Sent:	0
Dest. Unreachable Messages Sent:	0		

Figure 17

This web page shows statistics about the network connection to the module. This data is also available through the SNMP.

## Administration – Reboot

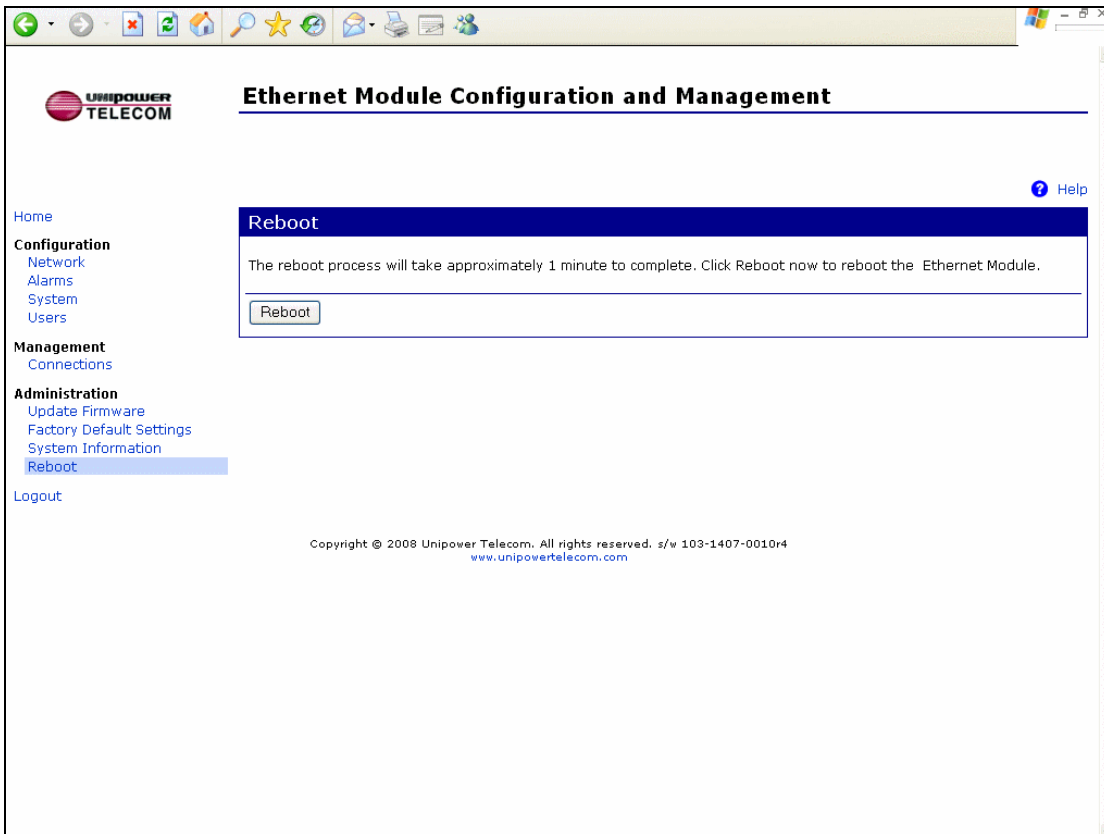


Figure 18

This page is used to reboot the module. This can be done if some changes have been made that require it.

## Log out

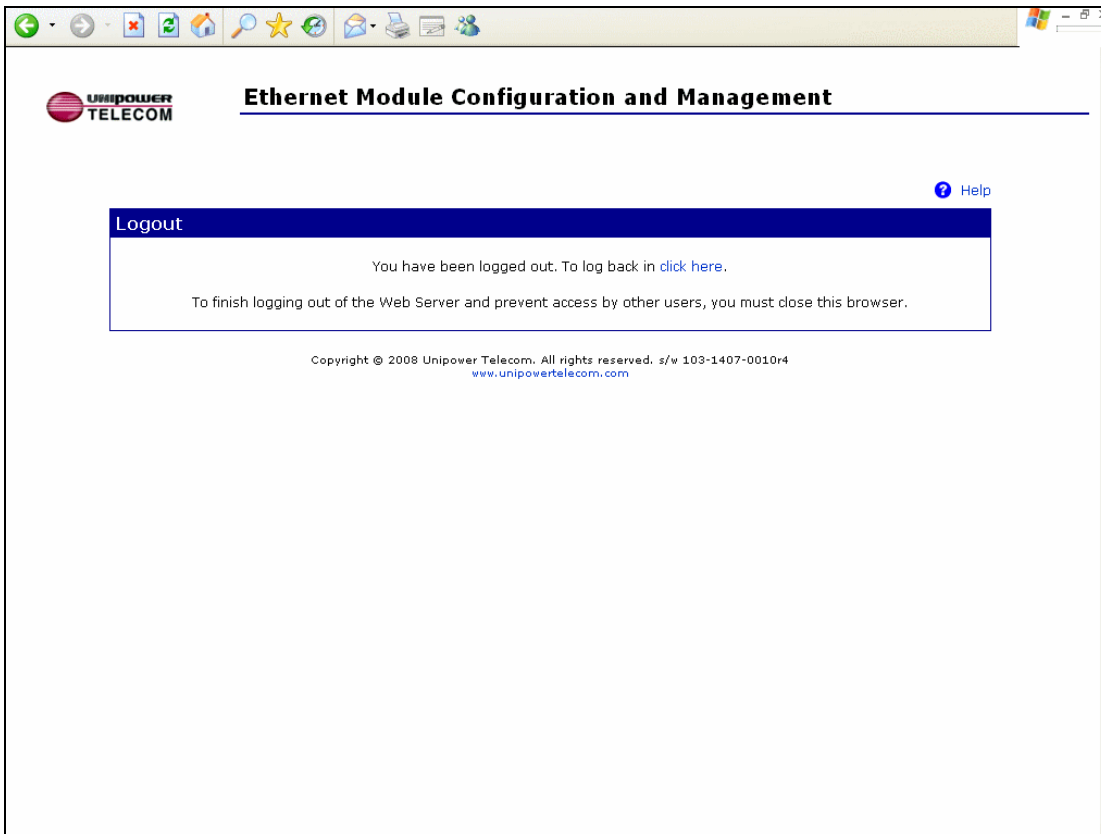


Figure 19

The page shown in figure 19 will be displayed when the user has successfully logged out.

## Further SNMP information

The SNMP module supports SNMP version 1.

The following MIBs should be used with the SNMP module:

RFC1213, MIB-II	Network Statistics
RFCs 1316, 1317	Port Statistics
DIGI-SMI	Enterprise MIB
DIGI-DEVICE-INFO-MIB	Enterprise MIB
DIGI-SERIAL-ALARM-TRAPS-MIB	Enterprise MIB

For more information on the statistics available through the standard RFCs listed above, refer to the RFCs available on the IETF web site ([www.ietf.org](http://www.ietf.org)). For enterprise MIBs, refer to the description fields in the MIB text.