

# NetProbe Lite

*Web Based 8 Channel Sensor Collector*

## User Manual

Version 1.2

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# CONTENTS

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<b>Chapter 1: Introduction</b>	<b>1</b>
Section 1. Features	1
Section 2. Networking with NetProbe Lite	2
Section 3. Package Contents	2
Section 4. NetProbe Lite Description	3
Section 5. NetProbe Lite DB-9 Pin Assignment	3
Section 6. NetProbe Lite Indicators	4
<b>Chapter 2: Installation Procedure</b>	<b>5</b>
<b>Chapter 3: NetProbe Lite Installation</b>	<b>6</b>
Section 1. Installation Procedure	6
<b>Chapter 4: Using Netility to Setup IP &amp; Update Firmware</b>	<b>8</b>
Section 1. Installing Netility	8
Section 2. Using Netility	8
2.1 Network Selection	8
2.2 Configure	9
2.2.1 IP Address	9
2.2.2 Advanced	10
2.3 Upgrade Firmware	10
2.4 About	11
2.5 Refresh	11
<b>Chapter 5: NetProbe Lite Web Manager</b>	<b>12</b>
Section 1. Introduction	12
Section 2. NetProbe Lite Web Manager Interface	12
2.1 Information	13
2.1.1 System Status	13
2.1.2 Current Status	14
2.2 Configuration	14
2.2.1 NetProbe Properties	14
2.2.2 Network	16
2.2.3 SNMP	19
2.2.4 Email	21
2.2.5 WEB	24
2.2.6 System Time	25
2.3 Log Information	27

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2.3.1 Event Log	27
2.3.2 Data Log	28
2.3.3 Save Data Log	28
2.4 Help	29
2.4.1 About NetProbe	29
<b>Appendix A: Methods to Update NetProbe Lite Firmware</b>	<b>31</b>

## Chapter 1: Introduction

### Section 1. Features

NetProbe Lite is designed to collect output from equipment or devices. This output can either be dry contact alarm signal or analog signals for remote monitoring and management systems. These are all important data within a complex enterprise network.

Some of the main features of this device are;

#### *Firmware:*

- Built-in Web Server
- Configuration via telnet, Web or Netility (freeware)
- PPPoE and DDNS protocol for xDSL broadband connection
- Allow Up to 8 User Accounts and Passwords
- Support Any Java-Enabled Web Browser
- Supports PDA, GPRS and WAP for GSM phone.
- Network Protocol: HTTP server, TCP/IP, UDP, SMTP, PPPoE, DDNS, DNS Client, SNTP, BOOTP, DHCP, Telnet, FTP, SNMP TRAP, PDA, WAP/GSM

#### *Hardware:*

- Built-in temperature and humidity sensor.
- Temperature detection range: -40°C to 100°C
- Humidity detection range: RH 0% to 100%
- Support 8 channels for Voltage input or 4 channels for dry contact input.
- 0V to 4.096V detection range in 8-bit / 10-bit / 12-bit resolution.
- Individual voltage mode. Voltage detection of Sig-1 to Sig-8
- Voltage difference mode: Voltage difference detection of (Sig-1 – Sig-2), (Sig-3 – Sig-4), (Sig-5 – Sig-6), (Sig-7 – Sig-8).
- LCD display shows the IP address, Subnet Mask, Gateway and Status or Voltage or individual channel sequentially.
- 32-Bit 50MHz RISC ARM7 CPU
- System clock: 25MHz or 50MHz
- Flash Memory: 512KB / 1MB / 2MB / 4MB / 8MB
- Dynamic Memory: 2MB / 8MB / 16MB
- Power supply: 4.8V to 7.0V DC, 250mA maximum.
- Operating Voltage: 3.3 volts
- Operating Temperature: 0°C ~ 50°C
- Operating Humidity: 5% ~ 90%
- Dimensions: 48mm x 63mm x 21mm
- Weight: 75g

**Section 2. Networking with NetProbe Lite**

With NetProbe Lite, the data in either analog voltage inputs (up to 8 devices) or dry contact digital inputs (up to 4 devices) can be collected and broadcast over the Internet or LAN. These data can then be translated by a MIB and managed using SNMP NMS over HP OpenView. Alternatively, the user can use a web browser to view and monitor these devices from the NetProbe Lite web page.

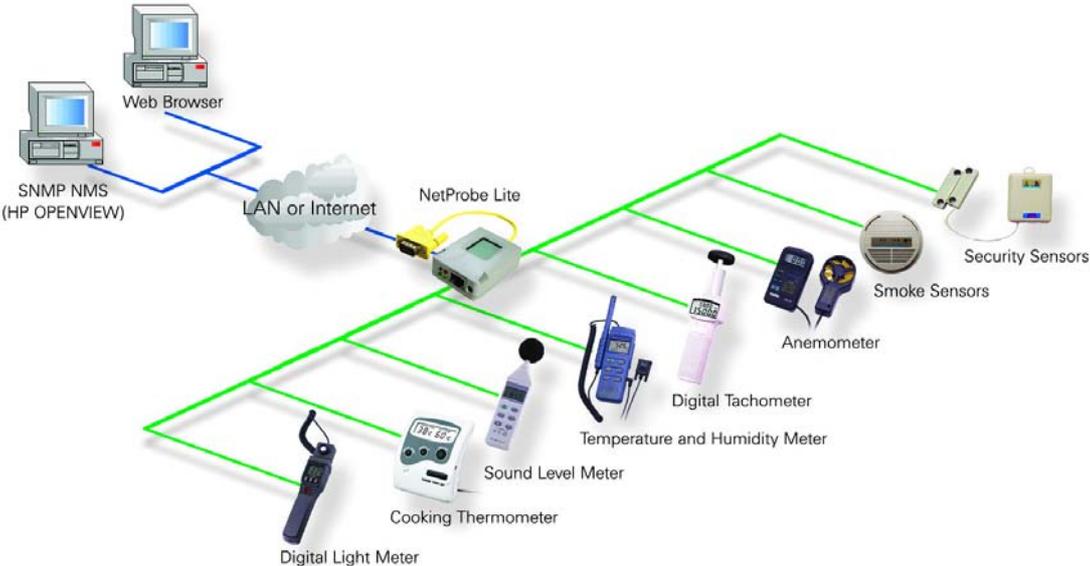


Fig.1 NetProbe Lite Network diagram

**Section 3. Package Contents**

A standard package should contain these items;

	<p>One NetProbe Lite module</p>
	<p>One Utility CD which contains;</p> <ol style="list-style-type: none"> <li>1. Netility: to configure IP address and update the firmware.</li> <li>2. Time Server: Time adjustment utility.</li> <li>3. Adobe Acrobat 5.0 Reader.</li> </ol> <p>User Manual</p>
	<p>One Power Adaptor (European / USA)</p>

**Section 4. NetProbe Lite Description**

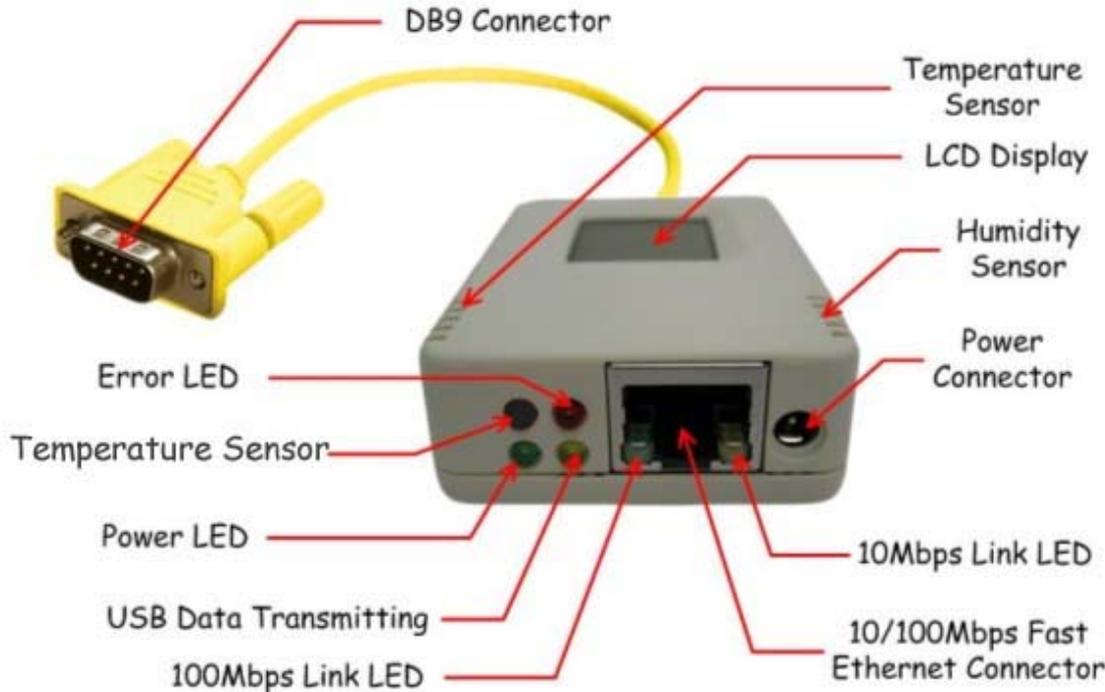


Fig.2 NetProbe Lite Front View

**Section 5. NetProbe Lite DB-9 Pin Assignment**

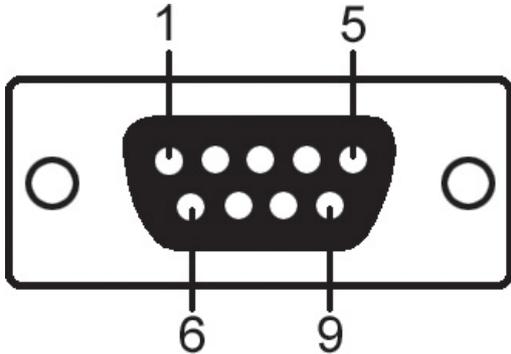


Fig.3 DB-9 Male

NetProbe Lite DB-9 PIN Assignment	
Male DB-9 Pin No.	RS-232
1	Sig-1
2	Sig-3
3	Sig-5
4	Sig-7
5	GND

6	Sig-2
7	Sig-4
8	Sig-6
9	Sig-8

Fig.4 NetProbe Lite DB-9 PIN assignment

**NOTE:** Due to the variety of available device, the user will have to modify the connector to suite their purpose.

## Section 6. NetProbe Lite Indicators

NetProbe Lite LED Status Indicators		
Color	Signal Definition	Condition / Description
Green	Power state	On: Normal power
Red	Error Condition	On: Error condition occurred
Yellow	Data activity	Flash when there is data detection on DB-9 signals. When there is a user logon, the Yellow LED will be ON for 30 seconds.

Fig.5 NetProbe Lite Status LED Indicator

NetProbe Lite LAN Port LED Light indicators	
Color	Condition / Description
Green	On: Internet correspond speed is 100M Flash: Data transmitting / receiving
Yellow	On: Internet correspond speed is 10M Flash: Data transmitting / receiving

Fig.6 NetProbe Lite LAN LED Indicator

## Chapter 2: Installation Procedure

Before you start using NetProbe Lite, you will need to set-up both the hardware and software. The following is a flow chart on the installation procedure:

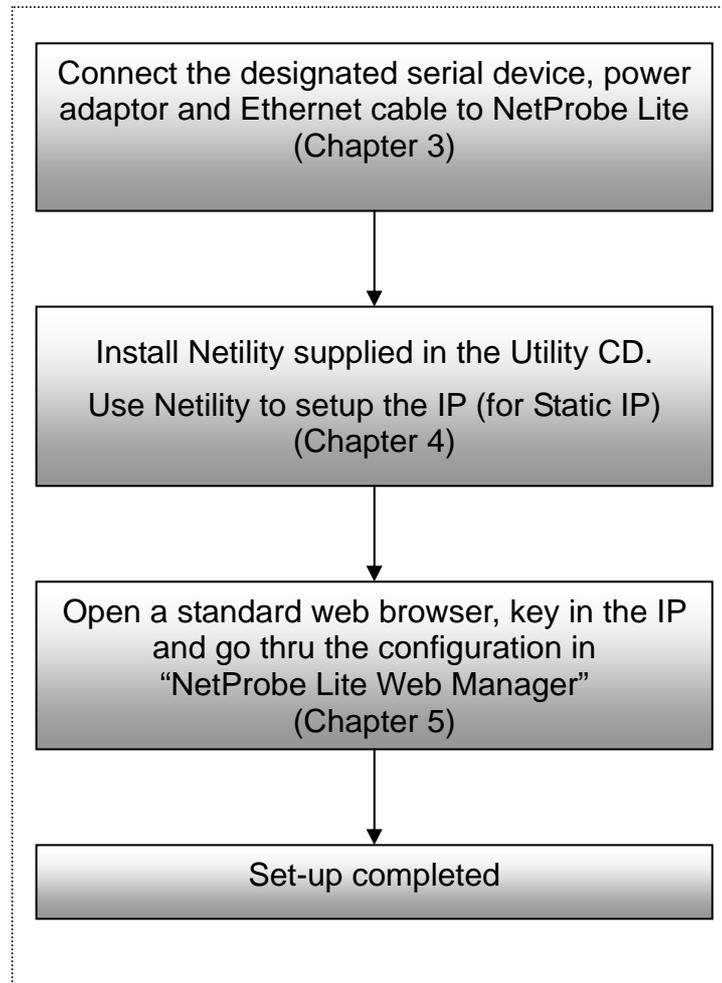


Fig.7 NetProbe Lite UPS installation flowchart

## Chapter 3: NetProbe Lite Installation

The following details the installation procedure for NetProbe Lite.

### Section 1. Installation Procedure

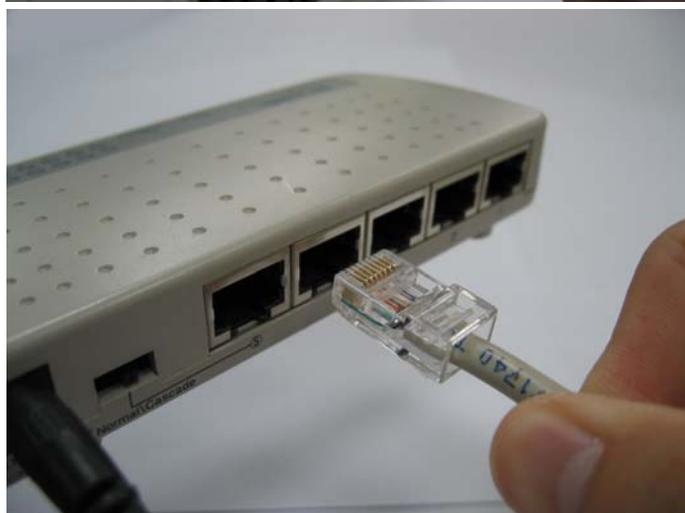
Step 1:

Connect the individual DB-9 pin to the device to be monitored.



Step 2:

Connect one end of the Ethernet cable to a hub / router.



Step 3:

Connect the other end of the Ethernet cable to NetProbe Lite Ethernet port.



Step 4:

Connect the DC adapter power output into NetProbe Lite socket, and plug the DC adaptor into the wall socket



Step 5:

The LCD will display the IP, Subnet Mask, Gateway, the current temperature and humidity.

Enter the shown IP address into a standard WEB browser to login into NetProbe Lite web manager.



**WARNING:**

Please make sure the input Voltage and Frequency of the DC power adapter (DC 5.3V) is correct before plugging into the power outlet.

## Chapter 4: Using Netility to Setup IP & Update Firmware

### Section 1. Installing Netility

1. Insert the Utility CD into the CD-ROM drive and execute Netility.exe
2. After installation is completed, 'Netility' group will appear in Windows 'Start' → 'Program Group'.



Fig.8 Netility Group

3. Click "Netility" to start the program.

### Section 2. Using Netility

The Netility main menu is shown below. The selection menu is located on the left. The device, hardware, firmware and IP address connected to a LAN are displayed on the right.



Fig.9 Netility Main Menu

#### 2.1 Network Selection

Once Netility starts-up, it will automatically search for the computer's Network card (If not, click on "Network Selection" on the main menu to start the search). A pop-up window will show the available Network Adapter.

Next, select the Network Adapter, which is connected to the LAN, and click 'OK' to return to the main menu. NetProbe Lite will now appear in the main menu display area.

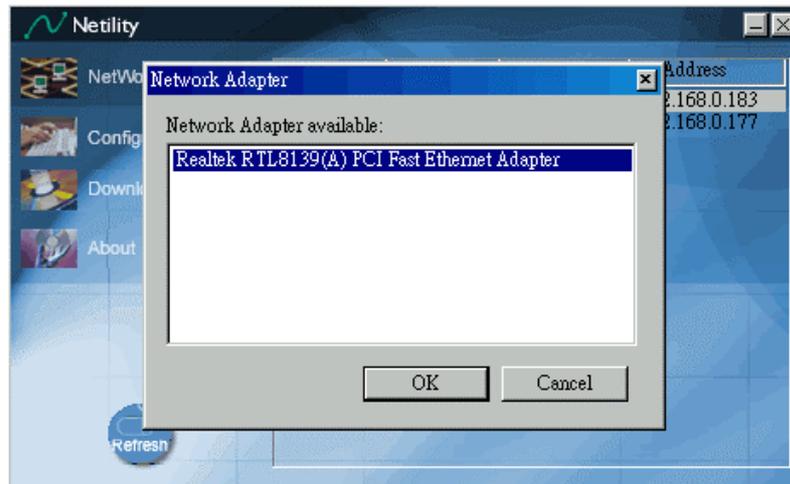


Fig.10 Netility: Network Selection

## 2.2 Configure

Select NetProbe Lite on the right display screen, and then click “Configure”. This will bring up the IP Address Configuration window. Here, the user can set;

- IP Address
- Advanced (for port setting configuration)

### 2.2.1 IP Address

This section sets an IP Address for NetProbe Lite. Enter your IP Address if you have a Static IP otherwise choose Obtain an IP address by DHCP.

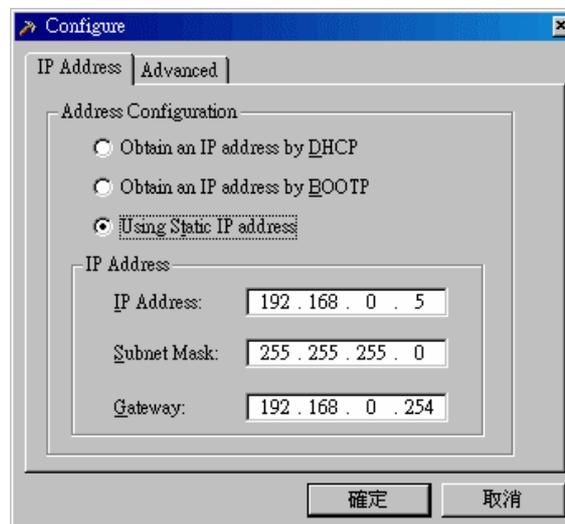


Fig.11 Netility: Set an IP Address for NetProbe Lite

Once the IP address is set, you will be able to connect to the NetProbe Lite webpage from a standard browser.

Obtain an IP address by DHCP or BOOTTP – the IP address, Subnet Mask and Gateway is acquired automatically by the system.

### 2.2.2 Advanced

In order to increase security of NetProbe Lite, Netility offers two additional security features:

#### i. Netility Password

Use this to set an access password for Netility.

**WARNING:**

Do not lose this password. If the password is lost, Netility will not be able to perform future firmware upgrades.

#### ii. Management Protocol (This function is disabled for NetProbe Lite)

### 2.3 Upgrade Firmware

Netility offers a convenient firmware upgrade. To upgrade your firmware follow the following procedure.

Download the latest firmware;

1. Open internet explorer and browse to;  
<http://www.megatec.com.tw/CustomerService/Download/csdownload.htm>  
 Make sure that you choose "NetProbe Lite" (Downloading the wrong firmware may permanently damage NetProbe Lite).
2. Check if the latest firmware has been released.
3. Click  to download and save the file to your local hard drive.

Upgrade NetProbe Lite firmware;

1. Open Netility,
2. Click "Download Firmware" from the Netility main menu,
3. Click , and browse to the location where you save the firmware.
4. Select the new firmware file (\*.bin) and,
5. Click "Start".

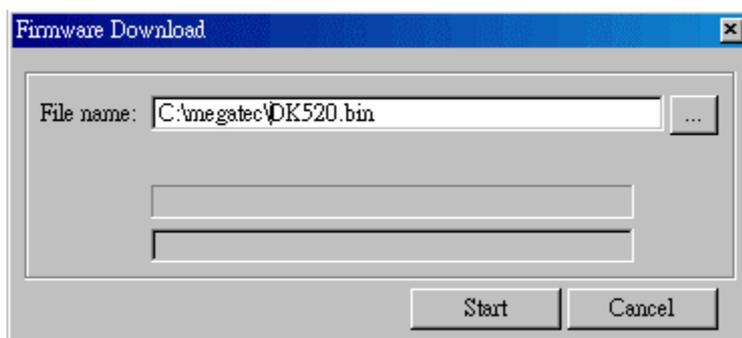


Fig.12 Netility: Update NetProbe Lite firmware

NetProbe Lite red and yellow LED will flash alternately to indicate that firmware upgrading is in progress. Once completed, NetProbe Lite will reboot.

**Note:** If the downloading / upgrade process is interrupted or the data is corrupted, NetProbe Lite will keep its default firmware to avoid complete data loss. If this happens, repeat the above firmware upgrade procedure.

## 2.4 About

This section displays the current Netility version.



Fig.13 Netility version examined

## 2.5 Refresh

Normally, Netility will automatically search for any NetProbe Lite connected to the LAN. However, the user can do a manual search by click the "Refresh" icon.



Fig.14 Netility: Manually search for NetProbe Lite

## Chapter 5: NetProbe Lite Web Manager

### Section 1. Introduction

After you have setup the hardware and set an IP address for NetProbe Lite, you will then be able to go to NetProbe Lite web site to monitor, manage and control the serial devices. All you have to do is enter the new IP address into any standard web browser.

To do this;

1. Start the Web Browser (Netscape or Internet Explorer)
2. Enter NetProbe Lite IP Address that was set earlier using Netility (e.g. 211.21.67.51) and press [ENTER]

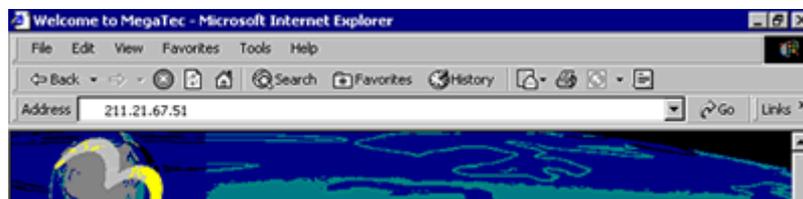


Fig.15 Enter NetProbe Lite IP address

3. A login screen will appear, press [ENTER]. By default the username and password is left blank.



Fig.16 NetProbe Lite Login screen

### Section 2. NetProbe Lite Web Manager Interface

NetProbe Lite webpage main menu is divided into two sections. The selections menu on the left and display menu on the right. The selection menu consists of the following options:

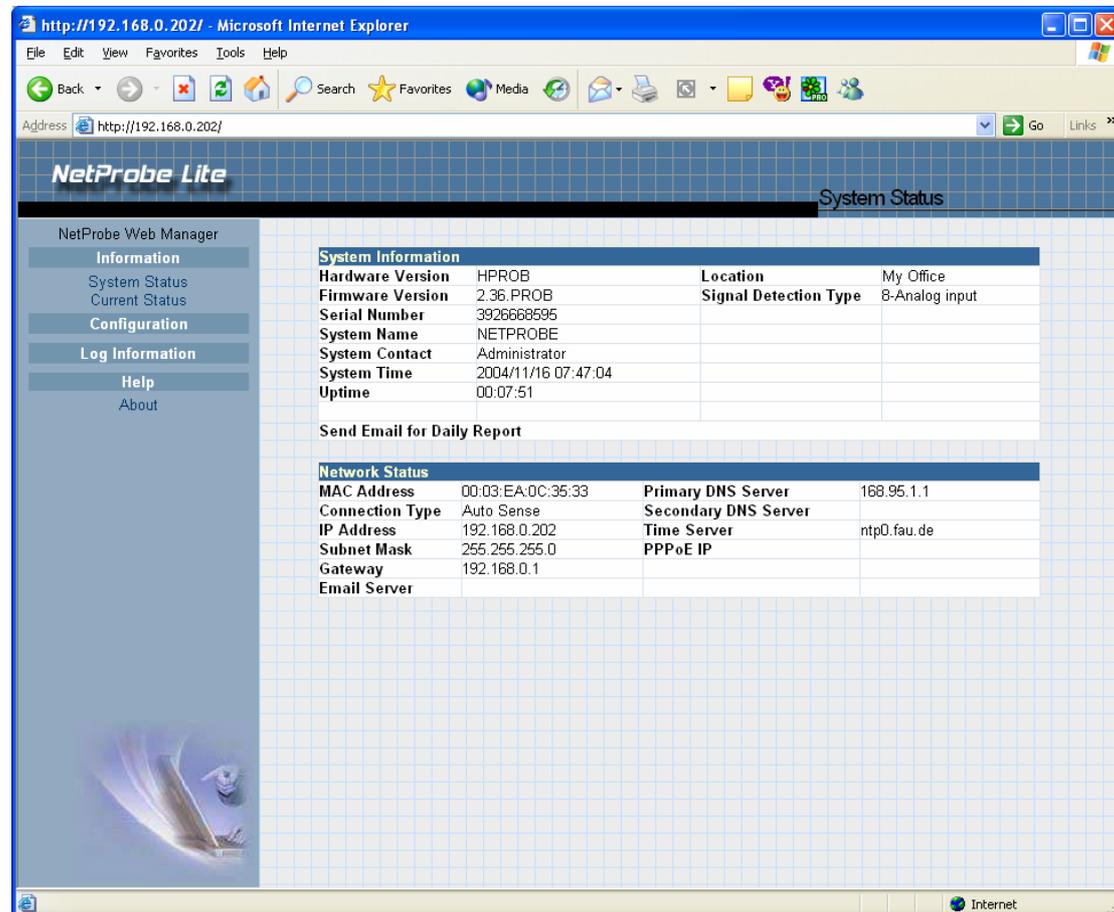
- 2.1 Information
- 2.2 Configuration
- 2.3 Log Information
- 2.4 Help

## 2.1 Information

Click “Information” to open up the following sub-menu;

### 2.1.1 System Status

### 2.1.2 Current Status



The screenshot shows the NetProbe Lite web manager interface in a Microsoft Internet Explorer browser window. The address bar shows <http://192.168.0.202/>. The page title is "NetProbe Lite" and the main heading is "System Status".

On the left side, there is a navigation menu for "NetProbe Web Manager" with the following options:

- Information
  - System Status
  - Current Status
- Configuration
- Log Information
- Help
  - About

The main content area displays two tables:

**System Information**

Hardware Version	HPROB	Location	My Office
Firmware Version	2.36.PROB	Signal Detection Type	8-Analog input
Serial Number	3926668595		
System Name	NETPROBE		
System Contact	Administrator		
System Time	2004/11/16 07:47:04		
Uptime	00:07:51		

Below the System Information table, there is a link: "Send Email for Daily Report".

**Network Status**

MAC Address	00:03:EA:0C:35:33	Primary DNS Server	168.95.1.1
Connection Type	Auto Sense	Secondary DNS Server	
IP Address	192.168.0.202	Time Server	ntp0.fau.de
Subnet Mask	255.255.255.0	PPPoE IP	
Gateway	192.168.0.1		
Email Server			

Fig.17 NetProbe Lite Information Menu

### 2.1.1 System Status

Click on “System Status” to display the System Information and Network Status. The information and values here are either provided by NetProbe Lite or were set by the users in the “Configuration” section earlier on.

#### i. System Information

This section shows NetProbe Lite System Information such as the Hardware and Firmware Version, the serial number, current / local System Time, the system name, contact, location, uptime and Signal Detection Type. These values are either provided by NetProbe Lite or set by user earlier.

#### ii. Network Status

This section shows NetProbe Lite Network settings. The MAC address is unique to every NetProbe Lite. All the other values are set by the user in the Configuration page.

### 2.1.2 Current Status

The *Current Status* displays information collected by NetProbe Lite. Such as Temperature, Humidity and data from each connected device.

By default the *Refresh Status* is set to 10 seconds. Choose between; 2 seconds, 5 seconds, 10 seconds, 30 seconds and 1 minute.

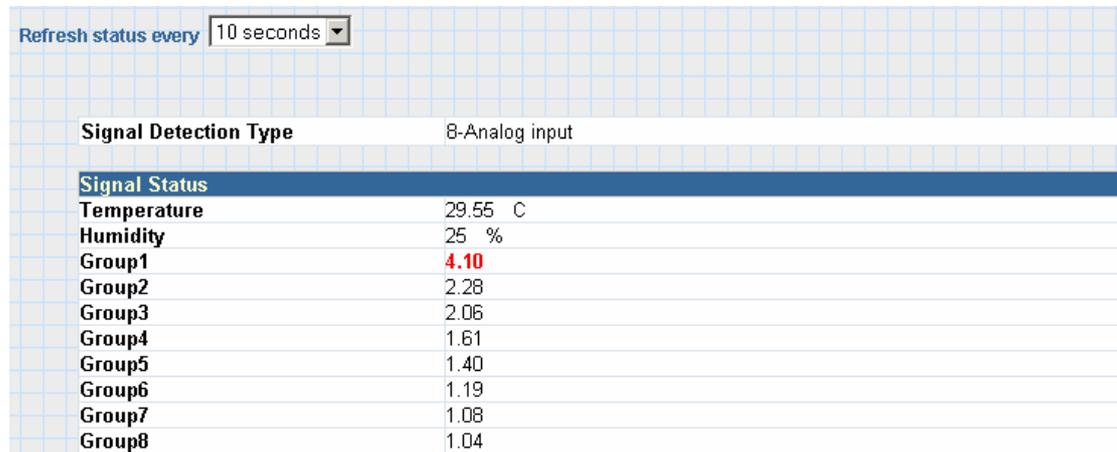


Fig.18 NetProbe Lite Current Status Menu

## 2.2 Configuration

Please ensure that each of the following option is set correctly. Otherwise, NetProbe Lite may not work properly.

### 2.2.1 NetProbe Properties

#### 2.2.2 Network

#### 2.2.3 SNMP

#### 2.2.4 Email

#### 2.2.5 WEB

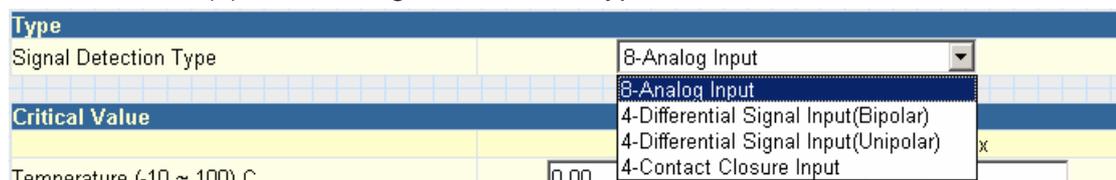
#### 2.2.6 System Time

### 2.2.1 NetProbe Properties

This section determines the types of signal to be detected and their detection parameters.

#### i. Type

There are four (4) different Signal Detection Types available.



Signal Detection Type	Description
8-Analog input	For detection 8 individual analog signals. Signal detection range from 0 v to +4.096 v
4-Differential Signal Input	For detection 4 differential analog signals. Signal

(Bipolar)	detection range from -2.048 v to +2.048 v
4-Differential Signal Input (Unipolar)	For detection 4 differential analog signals. Signal detection range from 0 v to +4.096 v
4-Contact Closure Input	For detection 4 contact closure signals. Signal detection of either opened or closed state.

## ii. Critical Value

Enter in the minimum and maximum Temperature / Humidity detection range.

Critical Value		
	Min	Max
Temperature (-10 ~ 100) C	<input type="text" value="0.00"/>	<input type="text" value="50.00"/>
Humidity (0 ~ 100) %	<input type="text" value="0"/>	<input type="text" value="80"/>

### Temperature

Set the temperature range between -10 C to 100 C.

### Humidity

Set the humidity range between 0 to 100%.

If the temperature drops below the minimum set value or over the maximum value, a TRAP will be sent.

## iii. Analog / Bipolar / Unipolar Detection Setting

Analog Detection Setting (0 V ~ 4.096 V)					
Group	Caption	Factor	Unit	Min	Max
1	<input type="text" value="Group1"/>	* <input type="text" value="1.00"/>	<input type="text"/>	<input type="text" value="0.00"/>	<input type="text" value="4.00"/>
2	<input type="text" value="Group2"/>	* <input type="text" value="1.00"/>	<input type="text"/>	<input type="text" value="0.00"/>	<input type="text" value="4.00"/>
3	<input type="text" value="Group3"/>	* <input type="text" value="1.00"/>	<input type="text"/>	<input type="text" value="0.00"/>	<input type="text" value="4.00"/>
4	<input type="text" value="Group4"/>	* <input type="text" value="1.00"/>	<input type="text"/>	<input type="text" value="0.00"/>	<input type="text" value="4.00"/>
5	<input type="text" value="Group5"/>	* <input type="text" value="1.00"/>	<input type="text"/>	<input type="text" value="0.00"/>	<input type="text" value="4.00"/>
6	<input type="text" value="Group6"/>	* <input type="text" value="1.00"/>	<input type="text"/>	<input type="text" value="0.00"/>	<input type="text" value="4.00"/>
7	<input type="text" value="Group7"/>	* <input type="text" value="1.00"/>	<input type="text"/>	<input type="text" value="0.00"/>	<input type="text" value="4.00"/>
8	<input type="text" value="Group8"/>	* <input type="text" value="1.00"/>	<input type="text"/>	<input type="text" value="0.00"/>	<input type="text" value="4.00"/>

Caption	Description
Group	Group number, corresponding to "Sig" grouping.
Caption	Enter a suitable name for this group signal.
Factor	The factor needs to multiply on the signal voltage detected.
Unit	The Unit of the signal.
Min	Set the minimum value (0V)
Max	Set the maximum value (4.096V)

## iv. Contact Closure Detection Setting

Detection Setting	
Group	Caption
1	Group1
2	Group2
3	Group3
4	Group4

Enter a suitable name for the group signal (Maximum of 31 characters)

#### v. Data Log

Data Log	
Record Data Every	1 minute

#### Record Data Every

Use this option to determine the record interval. Choose between; 1 minute, 10 minutes, 30 minutes, 1 hour or None.

### 2.2.2 Network

This option determines NetProbe Lite Network settings.

#### i. IP Address

IP Address	
IP Address	192.168.0.30
Subnet Mask	255.255.255.0
Gateway	192.168.0.1
Obtain an IP address*	By manual

Fig.19 NetProbe Lite IP Address Settings

#### IP Address

If you want to fix the IP address, enter your chosen IP address here. Otherwise go to "Obtain an IP address" and choose "via DHCP"

#### Subnet Mask

This item sets NetProbe Lite Subnet Mask. The value is normally 255.255.255.0

#### Gateway

This item is to set NetProbe Lite Gateway.

#### Obtain an IP address

The IP address can be set;

- By manually
- Using DHCP, or
- Using Bootp

NetProbe Lite will reboot after the above settings have been changed.

#### ii. DNS Server IP

DNS Server IP	
Primary DNS Server IP	192.168.0.1
Secondary DNS Server IP	

Fig.20 NetProbe Lite DNS Server IP

**Primary DNS Server IP**

This item sets NetProbe Lite primary DNS Server IP address. Enter a value here if you have a DNS Server IP.

**Secondary DNS Server IP**

This item sets NetProbe Lite secondary DNS Server IP address. NetProbe Lite will use the secondary DNS Server IP address if the Primary DNS Server IP address is not working.

**iii. Ethernet**

Ethernet	
Connection Type*	Auto Sense

Fig.21 NetProbe Lite Ethernet Settings

**Connection Type**

This item sets the communication speed between NetProbe Lite and the Network. Choose "Auto Sense" to let NetProbe Lite automatically decide on the appropriate connection speed. Alternatively you can manually choose either;

- 10Mbps Half-Duplex
- 10Mbps Full-Duplex
- 100Mbps Half-Duplex
- 100Mbps Full-Duplex

NetProbe Lite will reboot if this setting is changed.

**iv. Dynamic DNS**

Dynamic DNS	
Services Provider	None
Domain Name	
Login Name	
Login Password	
Use external STUN server to get Public IP to register	Yes
Primary STUN Server IP	66.7.238.210
Secondary STUN Server IP	67.153.142.67

Fig.22 NetProbe Lite Dynamic DNS Settings

**Service Provider**

For users with a Dynamic IP, NetProbe Lite can be configured to point the current IP (as provided by your ISP upon each successful dial-up to the internet) to a dynamic DNS provider. This will enable you to locate NetProbe Lite every time the IP changes due to an ADSL connection redial.

To enable this function, you will first have to register with either one of these three service providers;

- None (Choose this only if you have a Static IP)
- 3322.org
- dhs.org
- DynDNS(Dynamic)
- DynDNS(Custom)
- Myddns.com
- Zive.org

### Domain Name

Enter the Domain Name you have created from one of the three websites.

### Login Name

Enter your login name for the above domain name. You should have this when you register with the above DDNS provider.

### Login Password

Enter your password. You should have this when you register with the above DDNS provider.

### Use external STUN server to get Public IP to register

Enable/disable using the external IP for DDNS server registration. If this function is enabled, the NET101 will get the external IP by the help of STUN server, and then use this IP to register the IP of the DDNS server.

### Primary STUN Server IP

Input the primary STUN server IP. The NET101 will use this server's help to get the external IP address. The default IP is 66.7.238.210.

### Secondary STUN Server IP

Input the secondary STUN server IP. The NET101 will use this server's help to get the external IP address when the primary STUN server has no respond. The default IP is 67.153.142.67.

## v. PPPoE

Use this option to allow NetProbe Lite to connect to the internet using your xDSL modem. Once set-up, NetProbe Lite will be able connect to the Internet directly without going thru a PC.

PPPoE	
When Connection should be made	Disabled
Login Name	<input type="text"/>
Login Password	<input type="password"/>

Fig.23 NetProbe Lite PPPoE setting

### When Connection should be made

The user has a choice of;

- Disabled : Default setting.
- Connect always : NetProbe Lite will automatically dial up the ISP.

### Login Name

Enter your login name as provided by your ISP.

### Login Password

Enter your password as provided by your ISP.

## 2.2.3 SNMP

This page is to set the SNMP settings so it can be used by a NMS (Network Management System).

### i. MIB System

MIB System		
System Name	System Contact	System Location
NETPROBE	Administrator	My Office

#### System Name

This is to give NetProbe Lite a name.

#### System Contact

This is to give the administrator a name.

#### System Location

This is to set NetProbe Lite location.

### ii. Access Control

Access Control			
Manager IP Address	Community	Permission	Description
****	public	Read/Write	
****	public	No Access	
****	public	No Access	
****	public	No Access	
****	public	No Access	
****	public	No Access	
****	public	No Access	
****	public	No Access	

#### Manager IP Address

This set the IP address from where the administrator can manage NetProbe Lite. It is valid for up to 8 IP addresses. Use \*.\*.\*.\* to manage NetProbe Lite from any IP addresses.

#### Community

This is to set a Community name for NMS. The community name has to be the same as that set in NMS.

### Permission

This is to set the administrator's authority. Options are Read, Read/Write, and No Access.

### Description

This is for an administrator to make notes

### iii. Trap Notification

The user can set up to eight (8) Trap recipient's address.

Trap Notification					
Receiver IP Address	Community	Severity	Accept	Description	Events
<input type="text"/>	public	Information	No	<input type="text"/>	Select
<input type="text"/>	public	Information	No	<input type="text"/>	Select
<input type="text"/>	public	Information	No	<input type="text"/>	Select
<input type="text"/>	public	Information	No	<input type="text"/>	Select
<input type="text"/>	public	Information	No	<input type="text"/>	Select
<input type="text"/>	public	Information	No	<input type="text"/>	Select
<input type="text"/>	public	Information	No	<input type="text"/>	Select
<input type="text"/>	public	Information	No	<input type="text"/>	Select

### Receiver IP Address

Enter the email address of the person to receive Trap Notification.

### Community

This is to set a Community name for NMS. The community name has to be the same as that set in NMS.

### Severity

This determines the severity of the Trap. It is divided into three main types:

Type	Description
Information	To receive all traps
Warning	To receive only "warning" and "Severe" traps
Severe	To receive only severe trap

Please refer to your NMS for Trap levels and settings.

### Accept

Use this section to set weather the recipient should receive a TRAP or not. Useful for temporarily disable Trap reception for the user.

### Description

This is for the administrator to make short notes (Max of 47 characters).

## Events

This section allows you to select events you will be notified of from a drop-down list. Click the “select” button, a menu will open. Click either “Yes” or “No”.

**Note:** The Trap notification for the “Input Events” will depend on the *Signal Detection Type* selected under *NetProbe Properties*.

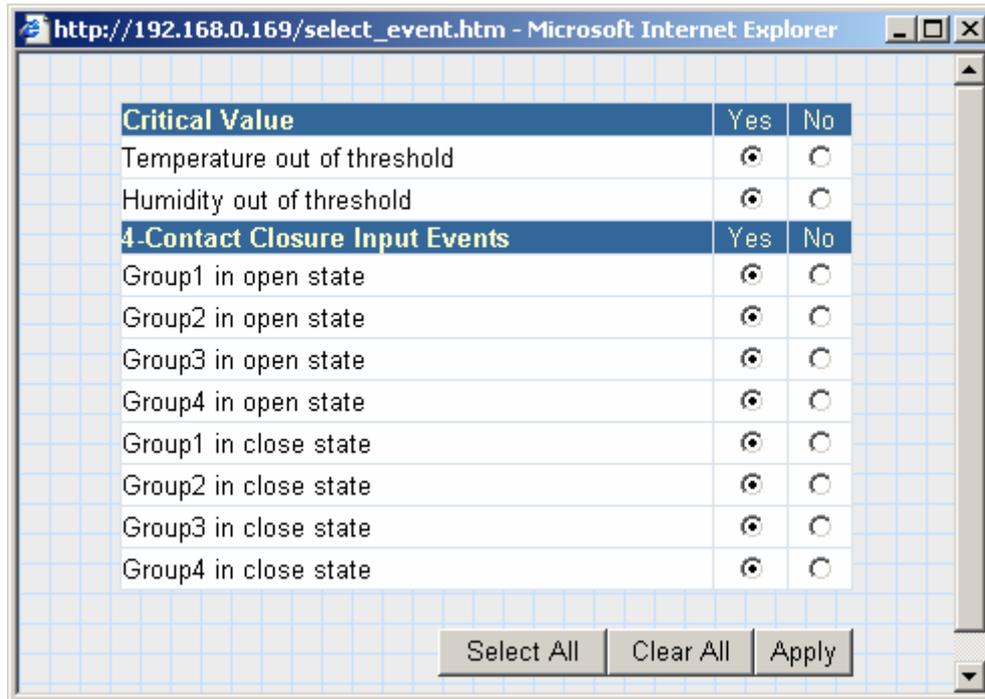


Fig.24 Trap Selection in a 4-Contact Closure Signal Detection setting.

Click “Apply” to confirm otherwise the changes will not be saved. NetProbe Lite will confirm changes with a “Write Complete” message. Click “OK” to return to the menu.

## 2.2.4 Email

This option sets the Email details for NetProbe Lite.

### i. E-mail Settings

Email Setting	
Email Server	<input type="text"/>
Sender's Email Address	<input type="text"/>
Email Server Requires Authentication	NO ▾
Account Name	<input type="text"/>
Password	<input type="text"/>
Send Email When Event Occurs	NO ▾

Fig.25 NetProbe Lite E-mail Setting

### E-mail Server

Enter the email server.

**Sender's Email Address**

This item determines NetProbe Lite's Email address.

**Email Server Requires Authentication**

If set to "YES", the user will have to provide the account/password for accessing the Email server. Otherwise, enter "NO".

**Account Name**

Enter the account (login) name for the email server (Maximum 32 characters).

**Password**

Enter the password for the above account name.

**Send Email When Event Occurs**

If set to "YES", NetProbe Lite will send an email to the Recipient's Email Address when an event occurs. Enter up to 8 recipient's email address in the next section.

**ii. Recipient's Email Address (for Event Log)**

The user can determine which eight (8) email addresses will receive email notification when an event occurs.

Recipient's Email Address (for Event Log)			Events
Account1	<input type="text"/>	<input type="text"/>	Select
Account2	<input type="text"/>	<input type="text"/>	Select
Account3	<input type="text"/>	<input type="text"/>	Select
Account4	<input type="text"/>	<input type="text"/>	Select
Account5	<input type="text"/>	<input type="text"/>	Select
Account6	<input type="text"/>	<input type="text"/>	Select
Account7	<input type="text"/>	<input type="text"/>	Select
Account8	<input type="text"/>	<input type="text"/>	Select

Fig.26 NetProbe Lite Event Log recipient's email address

**Events**

This section determines the type of event an email is sent by NetProbe Lite. The lists of available events are similar to the *Trap Notification* event selection.

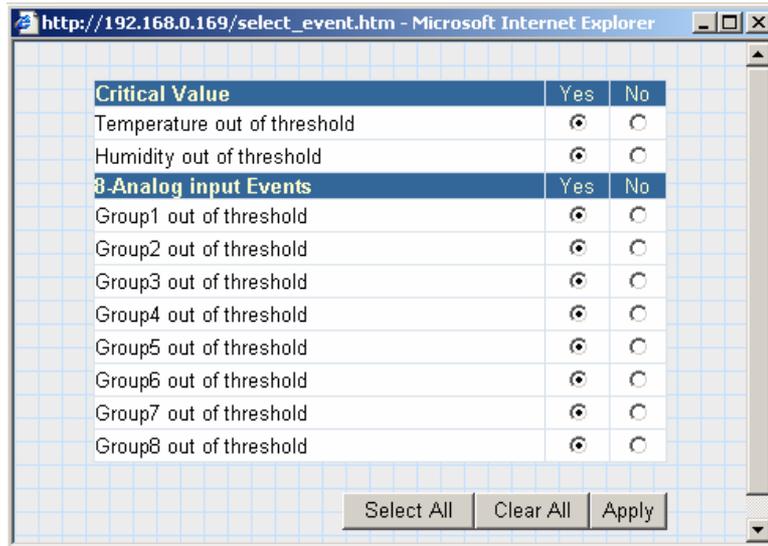


Fig.27 NetProbe Lite Event Selection List

NetProbe Lite will send the following email notification depending on which event has been selected.

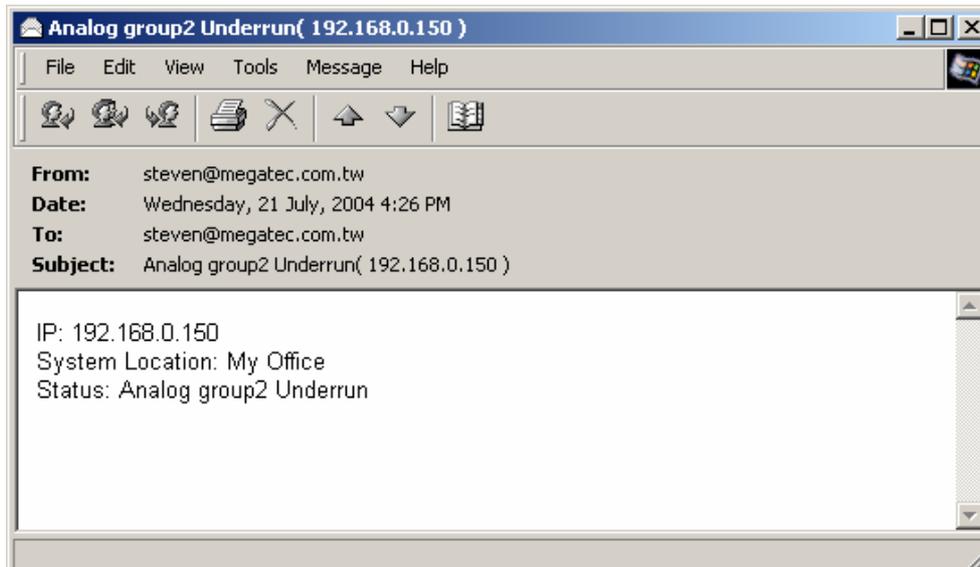


Fig.28 NetProbe Lite A Trap Event Notification

iii. **Recipient’s Email Address (for Daily Report)**

The user can determine which four (4) email addresses will receive a Daily Report from NetProbe Lite.

Recipient’s Email Address (for Daily Report)	
Account1	<input type="text"/>
Account2	<input type="text"/>
Account3	<input type="text"/>
Account4	<input type="text"/>
Send Email for Daily Report (hh:mm:ss)	NO <input type="button" value="v"/> at <input type="text"/>
Send email when Data Log overflow. (500 records)	No <input type="button" value="v"/>

Fig.29 NetProbe Lite Daily Report recipient's email address

**Account**

Enter the email address of the daily report recipient.

**Send Email for Daily Report (hh:mm:ss)**

To enable sending of a daily report, click "Yes" and enter the report time in 24hr format. The Daily report will include information from *Event Log* and *Data Log*.

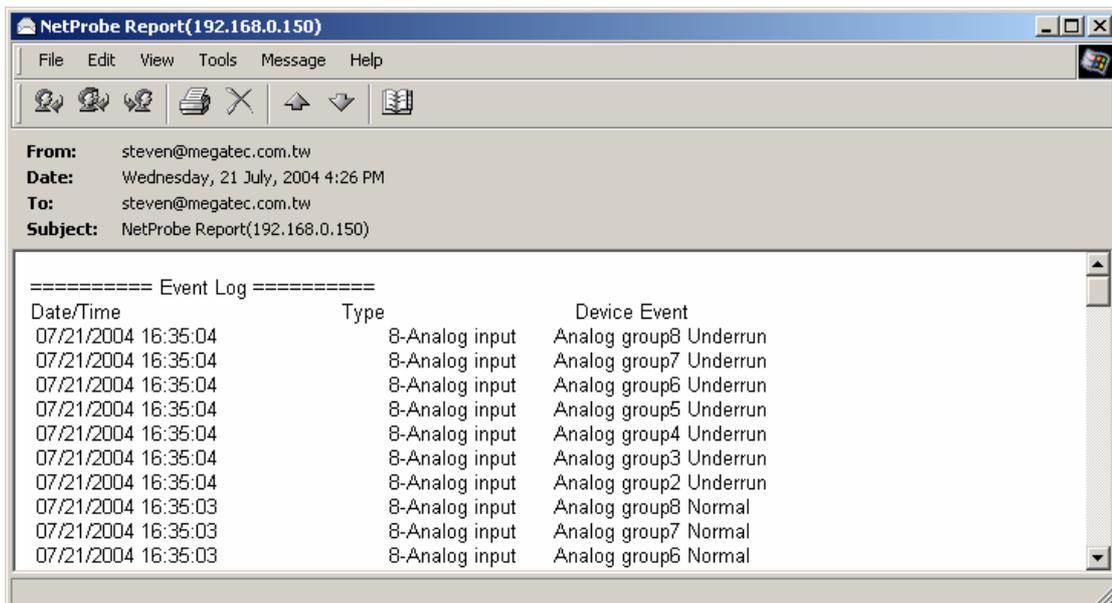


Fig.30 NetProbe Lite Daily Report email

**Send Email When Data Log overflow (500 records)**

This will send an email to the recipient notify that the recorded data has exceeded 500 items.

**2.2.5 WEB**

This section allows you to set up to eight (8) User account for NetProbe Lite. Once set, a valid username and password must be entered in order to access NetProbe Lite.

User Account			
User Name	Password	Permission	IP Filter
<input type="text"/>	<input type="text"/>	Read/Write	****
<input type="text"/>	<input type="text"/>	Read/Write	****
<input type="text"/>	<input type="text"/>	Read/Write	****
<input type="text"/>	<input type="text"/>	Read/Write	****
<input type="text"/>	<input type="text"/>	Read/Write	****
<input type="text"/>	<input type="text"/>	Read/Write	****
<input type="text"/>	<input type="text"/>	Read/Write	****
<input type="text"/>	<input type="text"/>	Read/Write	****

**i. User Account****User Name**

Enter a user name here (maximum length is 32 characters).

**Password**

Set a password for the account (maximum length is 16 characters, case sensitive).

**Permission**

Determine the permission to Read/Write (Administrator) or Read only.

**WARNING:** You MUST set at least one User Account permission to Read/Write (Administrator) BEFORE setting a Read Only. Failure to do so will result in you being locked out of NetProbe Lite Web Manager!

**IP Filter**

To increase security, the Administrator can specify the IP address of the user logging in. Leave “\*.\*.\*” to allow the user to login from any place.

Click “Apply” to accept changes. NetProbe Lite will confirm with a “Write Complete” message. Click “Reset” to undo current changes.

**2.2.6 System Time**

This section is to set and synchronize NetProbe Lite System Time with the chosen *Time Server*.

**i. System Time**

System Time	
Time Between Automatic Updates	1 Hour <input type="button" value="Adjust Now"/>
Time Server	ntp0.fau.de <input type="button" value="Edit"/>
Time Zone (Relative to GMT)	GMT
<input type="button" value="Apply"/> <input type="button" value="Reset"/>	
System Time (mm/dd/yyyy hh:mm:ss)	07/21/2004 02:44:27

**Time Between Automatic Updates**

This item sets the interval between each time synchronization. Select either; 1, 3, 12 hours or 1, 10 & 30 days. For manual and instant update, click “Adjust Now”

**Time Server**

Click the down arrow and choose the nearest Time Server to your NetProbe Lite location. Click “Edit” to bring up a list of 30 of the most common *Time Servers*.

Time Server	
ntp.ise.canberra.edu.au	<input type="button" value="Delete"/>
ntp0.coreng.com.au	<input type="button" value="Delete"/>
ntp0.cs.mu.OZ.AU	<input type="button" value="Delete"/>
ntp1.cs.mu.OZ.AU	<input type="button" value="Delete"/>
ntp1.rmp.br	<input type="button" value="Delete"/>

**Note:** NetProbe Lite can list a maximum of 30 *Time Servers*. In order to “Add” a new time server location, you must first delete an existing time server from the list.

To add a new time server location;

1. Click “Delete” to remove unwanted *Time Server*.
2. Click “OK” when it prompt “Are you sure that you want to delete the data?”
3. Enter the new time server URL in the space below and click “Add”.

<input type="text"/>	<input type="button" value="Add"/>	<input type="button" value="Back"/>
Time Server		
ntp.ise.canberra.edu.au	<input type="button" value="Delete"/>	
ntp0.coreng.com.au	<input type="button" value="Delete"/>	
ntp0.cs.mu.OZ.AU	<input type="button" value="Delete"/>	

Click “Back” to go back to the *System Time* menu.

### Time Zone (Relative to GMT)

Select the appropriate time zone for your area relative to GMT. The *System Time* will change automatically when the *Time Zone* is set.

### System Time (mm/dd/yyyy hh:mm:ss)

This section is to set NetProbe Lite System Time manually. The format is pre-determined to: mm/dd/yyyy hh:mm:ss

#### ii. Auto Restart

Auto Restart	
Auto Restart System for Every (0: Disable)	<input type="text" value="0"/> <input type="button" value="Minute"/>
<input type="button" value="Apply"/> <input type="button" value="Reset"/>	
Manual Restart System	

### Auto Restart System for Every (0: Disable)

Use this setting to auto restart the system at a predetermined interval. The default value is set to “0” (disabled). Enter between, 1 to 9999 Minute (i.e., between 1 minute or 166.65 hour) or 1 to 9999 Hour (1 hour to 416.6 days).

**Warning:** If the system resets, all the data recorded in the Event Log or Data Log will be erased!

### Manual Restart System

Use this feature to manually restart the system.

1. Click “Apply”,
2. A “Restart System Now” message will appear to confirm that the system is being restarted.

3. Click IE or your browser *Refresh* button to return to the webpage.

## 2.3 Log Information

NetProbe Lite will create log information for any variations detected and record it. Two types of logs are available,

### 2.3.1 Event Log

### 2.3.2 Data Log

#### 2.3.1 Event Log

An event log will be created for each of the device connected to NetProbe Lite. A total of 500 records can be logged. Click “Clear” at the bottom right of the log to delete all log files. The Event Log will record;

Date/Time	Type	Event
01/01/2001 00:00:45		Undefined
01/01/2001 00:00:23		Analog group5 Underrun
01/01/2001 00:00:18		Analog group6 Underrun
01/01/2001 00:00:18		Analog group4 Underrun
01/01/2001 00:00:18		Analog group2 Underrun
01/01/2001 00:00:08		Analog group3 Underrun
01/01/2001 00:00:06		Analog group7 Underrun
01/01/2001 00:00:04		Analog group8 Underrun

#### Date/Time

This is a record of the Date (mm/dd/yyyy) and Time (hh:mm:ss) when the data was recorded. The interval between every log can be set in Configuration.

#### Type

This shows the current *Signal Detection Type*. Refer to the icons below;

-  : 8-Analog Input
-  : 4-Differential Signal Input (Bipolar)
-  : 4-Differential Signal Input (Unipolar)
-  : 4-Contact Closure Input

#### Event

This displays the event corresponding to the Date/Time. The events that will be recorded for the detection:

- | <u>Signal Detection Type</u>              | <u>Event Recorded</u>                 |
|---|---------------------------------------|
| a. 8-Analog Input                         | Group #; Overrun, Normal and Underrun |
| b. 4-Differential Signal Input (Bipolar)  | Group #; Overrun, Normal and Underrun |
| c. 4-Differential Signal input (unipolar) | Group #; Overrun, Normal and Underrun |

- d. 4-ContactClosure Input      Group #; Close or Open state

### 2.3.2 Data Log

This is a data log page. It record changes in temperature, humidity and data from each connected device. It can log up to 500 events.

When this limit is reached NetProbe Lite will delete the earliest event record and continue logging new events. Logs can be saved in CSV format by clicking on “Save Data Log”.

Date/Time	Temperature	Humidity	Group1	Group2	Group3	Group4	Group5	Group6	Group7	Group8
07/21/2004 16:25:36	27.27C 81.09F	28 %	0.34	0.61	0.45	0.48	0.45	0.31	0.00	0.00
07/21/2004 16:24:35	27.27C 81.09F	29 %	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
07/21/2004 16:23:35	27.73C 81.91F	29 %	1.11	0.77	0.51	0.51	0.56	0.51	0.11	0.26
07/21/2004 16:22:35	26.82C 80.27F	30 %	0.42	0.55	0.37	0.39	0.37	0.31	0.21	0.16
07/21/2004 16:21:35	27.27C 81.09F	32 %	0.71	0.80	0.56	0.59	0.64	0.55	0.37	0.22
07/21/2004 16:20:35	27.27C 81.09F	30 %	0.85	1.01	0.69	0.66	0.69	0.58	0.40	0.26
07/21/2004 16:19:35	27.27C 81.09F	32 %	0.00	0.02	0.00	0.00	0.00	0.00	0.02	0.03
07/21/2004 16:18:35	27.27C 81.09F	32 %	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
07/21/2004 16:17:35	27.27C 81.09F	30 %	0.88	1.01	0.66	0.64	0.67	0.59	0.42	0.31
01/01/2001 00:00:04	27.27C 81.09F	30 %	1.27	1.09	0.71	0.67	0.77	0.69	0.39	0.35

1

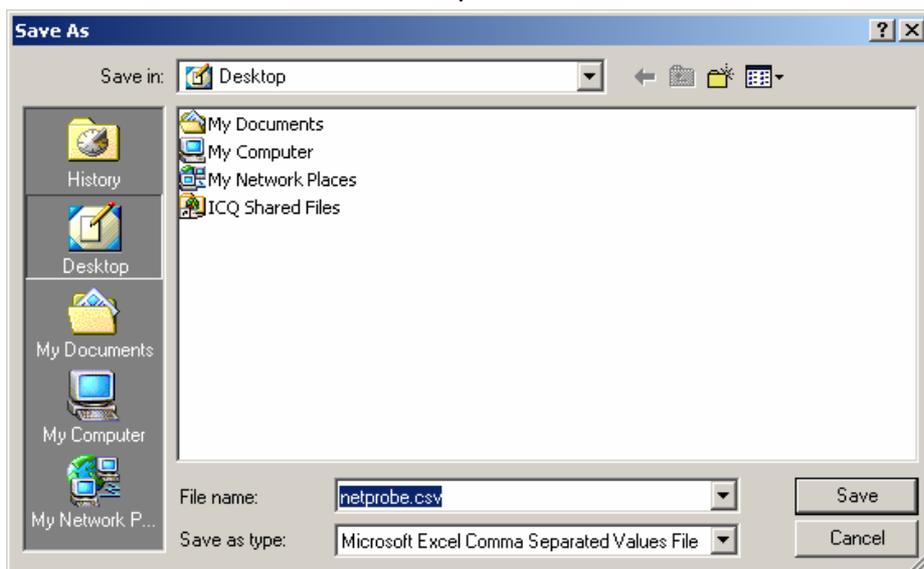
Clear

**Note:** To change the record interval between each data log go to “NetProbe Properties” → “Data Log”

### 2.3.3 Save Data Log

Use this function to save a record of the Data Log. Any record not saved will be lost in the event of a system reboot.

1. Click on “Save Data Log” to download the CSV file. Choose a file name and location. The default file name is netprobe.csv



2. Click “Save” to start downloading the file.

### 3. Use Microsoft Excel to open the file.

The screenshot shows a Microsoft Excel window titled 'netprobe.csv'. The spreadsheet contains the following data:

	A	B	C	D	E	F	G	H	I	J	K	L
1	Date/Time	Temperatu	Humidity	Group1	Group2	Group3	Group4	Group5	Group6	Group7	Group8	
2												
3	01-01-01 0:01	29.55C	85.27%	4.1	2.26	2.06	1.62	1.43	1.2	1.09	1.06	
4	01-01-01 0:00	29.55C	85.26%	0	0	0	0	0	0	0	0	
5												
6												
7												
8												
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17												
18												
19												
20												

## 2.4 Help

### 2.4.1 About NetProbe

The screenshot shows the 'About NetProbe' section of the web interface. It displays the following information:

About NetProbe	
NetProbe Firmware Version	2.36.PROB
NetProbe Hardware Version	HPROB
NetProbe Serial Number	3926668595

Below this, there is a 'Restore Settings' section with a 'Reset to factory default' button and a 'Reset' button.

At the bottom, contact information for Mega System Technologies, Inc. is provided:

Mega System Technologies, Inc.  
 Tel: +886-2-87922060 Fax: +886-2-87922066  
 E-mail: [service@megatec.com.tw](mailto:service@megatec.com.tw)  
<http://www.megatec.com.tw>

Fig.31 Event Log

#### NetProbe Lite Firmware Version

Display NetProbe Lite firmware version details.

#### NetProbe Lite Hardware Version

Show the hardware version.

#### NetProbe Lite Serial Number

Shows the serial number

#### Reset to Factory Default

Resets all settings to default settings.

### **Manufacturers Details**

Display the manufacture's contact details. Click on the email address to send an email to Mega System Technologies, Inc. Alternatively, click on the url to visit the website.

## Appendix A: Methods to Update NetProbe Lite Firmware

You can update NetProbe Lite's firmware using any of the following methods.

### Method 1: Using Netility

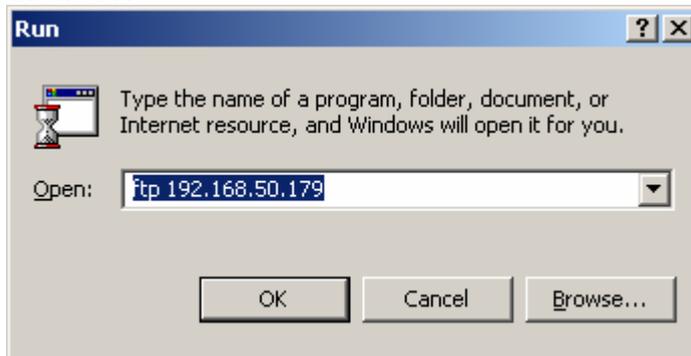
- (1) Use "Download Firmware" function under Netility to update it.

### Method 2: Using FTP

Windows FTP is another way to *upload* the latest firmware into NetProbe Lite. You can also use other FTP client software to do this.

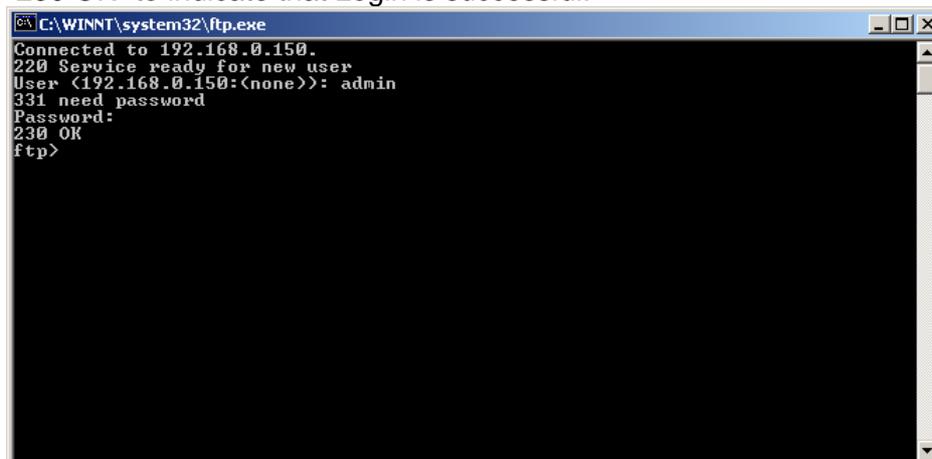
In the following example, NetProbe Lite IP address is 192.168.50.179

- (1) Click "Start" on Windows taskbar, then "Run..", type in "ftp 192.168.50.179"
- (2) Click "OK"



- (3) The systems will requests for your User Name and Password. Enter "admin" for User Name and press "Enter". The default password is left blank.

Once the User Name and Password is verified, the server will response with "230 OK" to indicate that Login is successful.



If you enter the wrong Username or Password, the server will response with "530 Not Logged in".

- (4) FTP commands:

ls : This command request the server to list all files and sub-file in the current menu. User may finds out the firmware version of the NetProbe Lite of its IP.

put <client's file route> : This command ask the client to copy its specific file route to the Server point. Use this to upload the latest firmware to your NetProbe Lite

quit : This command allow the user to logout and close the FTP connection.

Illustration: The picture shows, that the latest NetProbe Lite firmware file uploaded from the local computer located in (c:\work\netagent\prjs\nag\2.32.DK520.bin) to the NetProbe Lite with an IP address 192.168.50.179

```

C:\WINDOWS\System32\ftp.exe
Connected to 192.168.50.179.
220 Service ready for new user
User (192.168.50.179:(none)): admin
331 need password
Password:
230 OK
ftp> ls
200 Port command successful.
150 Opening ASCII mode data connection for file list.
2.32.DK520.bin
226 Transfer complete.
ftp: 16 bytes received in 0.00Seconds 16000.00Kbytes/sec.
ftp>
ftp> put c:\work\netagent\prjs\nag\2.32.DK520.bin
200 Port command successful.
150 Opening data connection for 2.32.DK520.bin
226 file received ok.
ftp: 1040384 bytes sent in 3.28Seconds 317.00Kbytes/sec.
ftp> quit
same version new type OK
    
```

#### Method 4: Using IE Browser

This method uses IE to update the latest firmware. Open IE, then type in the account, password and NetProbe Lite IP address to be updated in the following format, ftp://<username>:<password>@<NetProbe Lite IP address>.

Once logged in, the current firmware and version will be displayed. Copy the latest firmware to here to complete the updating process.

There are two method to log in:

(a) **ftp://admin:password@192.168.50.179**

Enter the password that was set earlier using Netility. Otherwise, enter NetProbe Lite's default value:

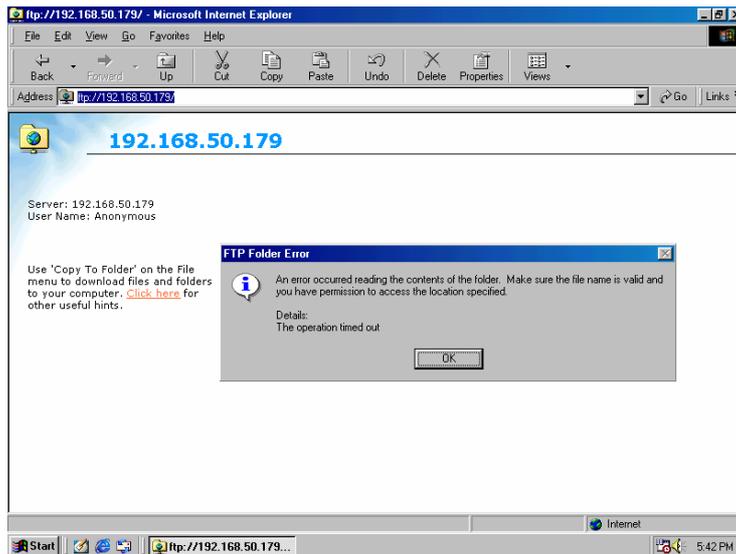
Username: admin

Password: <blank>

(example: <ftp://admin:@192.168.50.179>)

(b) **ftp://192.168.50.179/**

The follow error message will show, when the above is entered. Ignore it and select "Enter Identity" at the top left corner of file menu. Then enter "admin" as the User Name and <blank> Password to re-enter.



Once the connection has been established, the following window will be display. The user may then transfer the latest firmware here in order to complete the updating steps.

