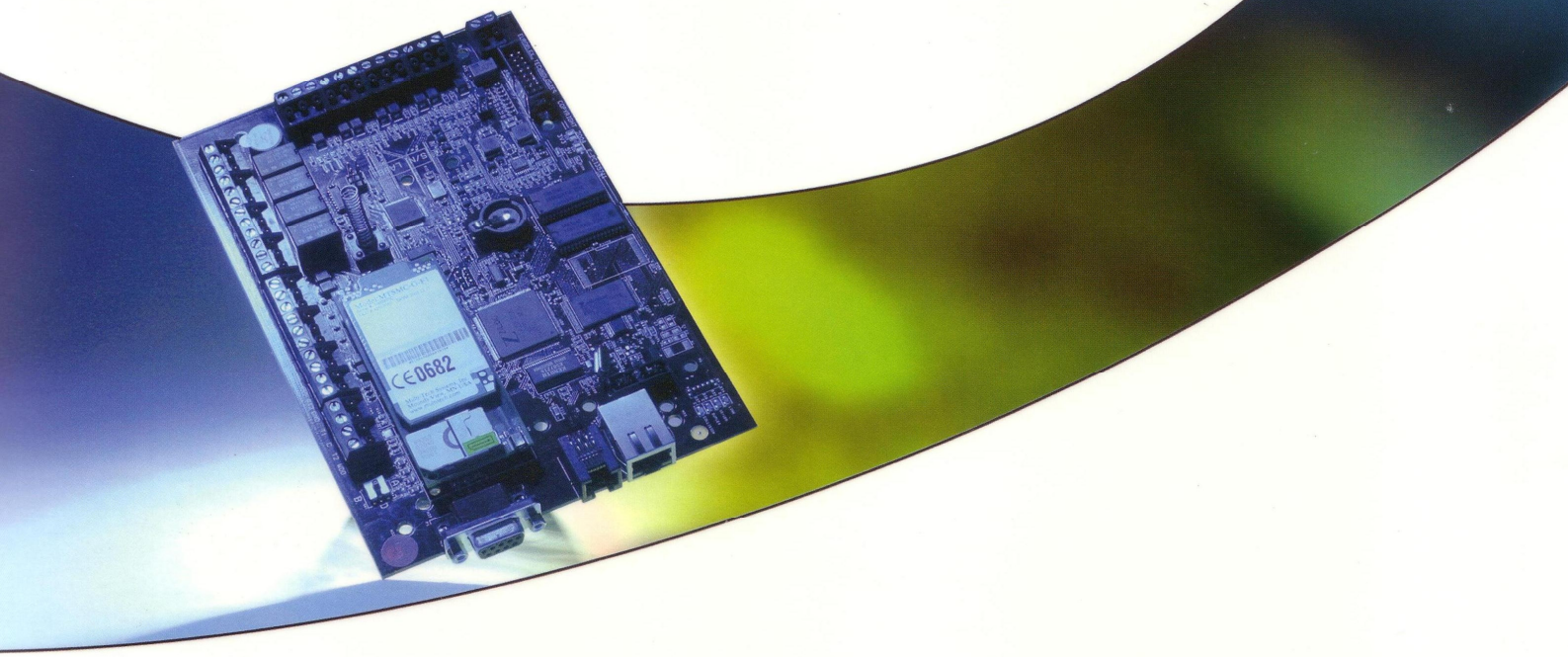
Installation and Configuration Guide

CiTeC II
Advanced Communications Products for Integrated Security Systems



An affordable and scaleable communications solution that provides a Security and Facility Management System on a single platform that is simple to install and maintain.

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Warning

While this system is an advanced design security system, it does not offer guaranteed protection against burglary, fire or other emergency. Any alarm system, whether commercial or domestic, is subject to compromise or failure to warn for a variety of reasons.

Therefore, good installation practices, thorough testing and regular maintenance by the installation company and frequent testing by the user are essential to ensure continuous satisfactory operation of the system. It is recommended that the Installation Company offer a maintenance program and instruct the user with the correct procedure for use and testing of the system.

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CiTeC II Installation and Configuration Manual – Issue 02, Manual Code 6099, 2004.

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1 Introduction to CiTeC II

CiTeC II is a dual signalling device that interfaces with the Europlex 3GS Integrated Intruder and Access Control System, providing this system with an interface to a Europlex Communication Engine called eCOMengine. A Client-Server Central Station (CS) package (eCOM PRO) is used in conjunction with eCOMengine to display sites and alarms received from all sites, and to remotely control these sites. Primary connectivity to the CS is achieved via Ethernet and secondary (backup) connectivity via PSTN or GSM.

CiTeC II can be configured to signal Network failure and PSTN/GSM failure. It can also be configured to report a range of 3GS Alarm activations to the CS as SIA events.

The CiTeC II unit at the 3GS panel will detect IP Network failure and switch over to PSTN/GSM automatically, and then switch back when the IP Network is restored. CiTeC II also monitors PSTN/GSM connection and will signal if a fault condition arises.

CiTeC II accepts and can be configured to acknowledge polls from the CS. All alarm activity is logged including network and line failure. All network polling timers are configurable at the CiTeC II, and also at the CS. All data communications are compressed, high speed and can be encrypted (128 bit) thus facilitating the secure fast transfer of large data which is ideal for helpdesk or central monitoring applications.

CiTeC II will accept incoming commands from the CS via network or PSTN/GSM connections. Such commands include remote setting/unsetting of system, viewing panel keypad, changing user codes, setting date/time etc.

The CS can also use Europlex Panelman software to connect to the 3GS panel over IP via CiTeC II, thereby allowing remote configuration of panels, and reducing the need for Engineer site visits. Upgrading firmware on CiTeC II can also be performed remotely by Engineers at the CS.

1.1 CiTeC II Cabinet

CiTeC II is supplied in two cabinet variations, one with a Europlex 3Amp Intellipower PSU and one without. The 3 Amp PSU option is shown below.

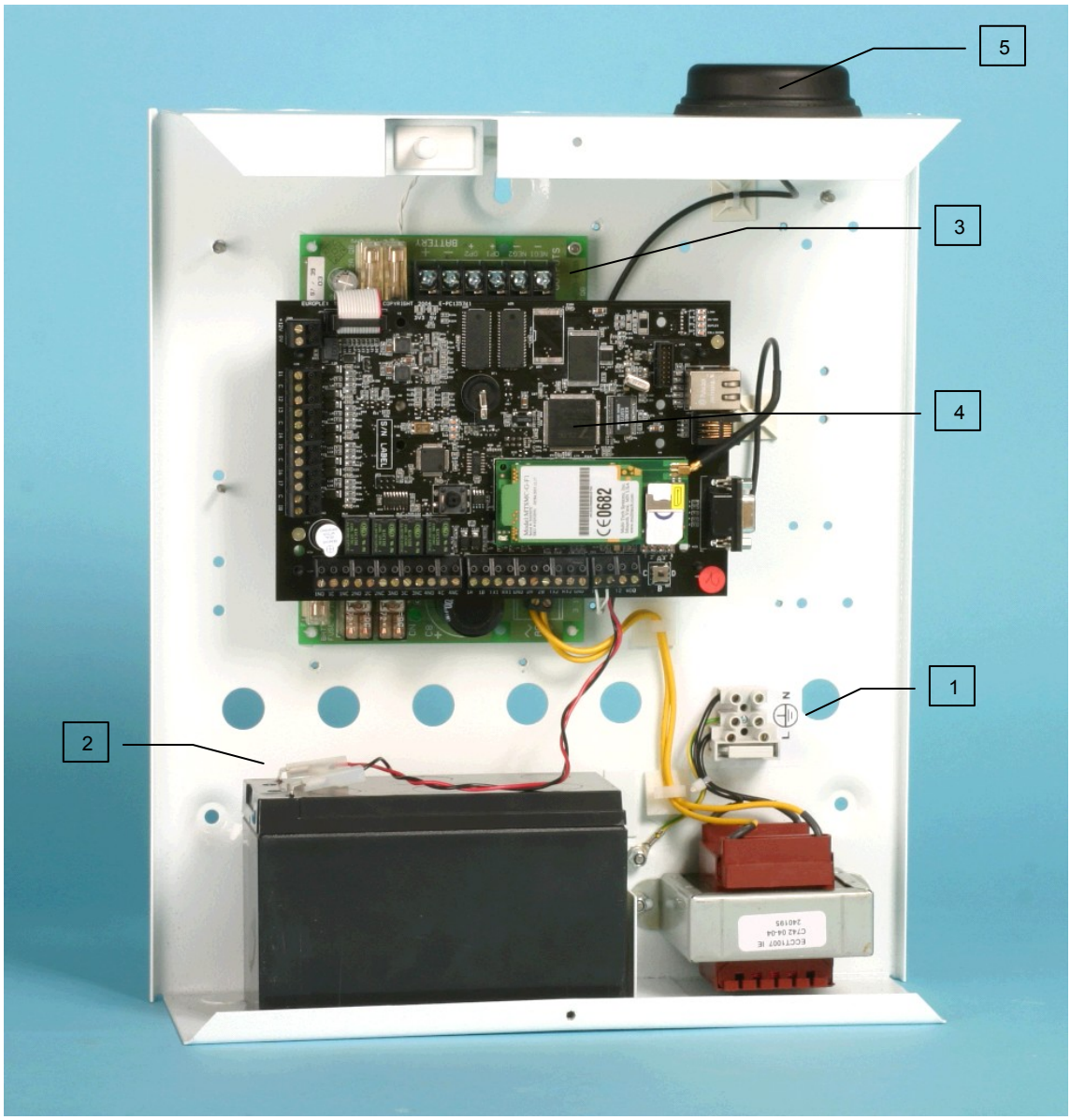

Figure 1: CiTeC II Cabinet

1.	**Mains Input**	220V AC input connection
2.	**Battery Leads**	For connection of Backup Battery
3.	**3Amp Intellipower PSU**	See Section 1.2 for details
4.	**CiTeC II PCB**	See Section 1.3 for details of connections
5.	**GSM Antenna**	Used on CiTeC II with GSM option

1.2 3 Amp Power Supply Unit.

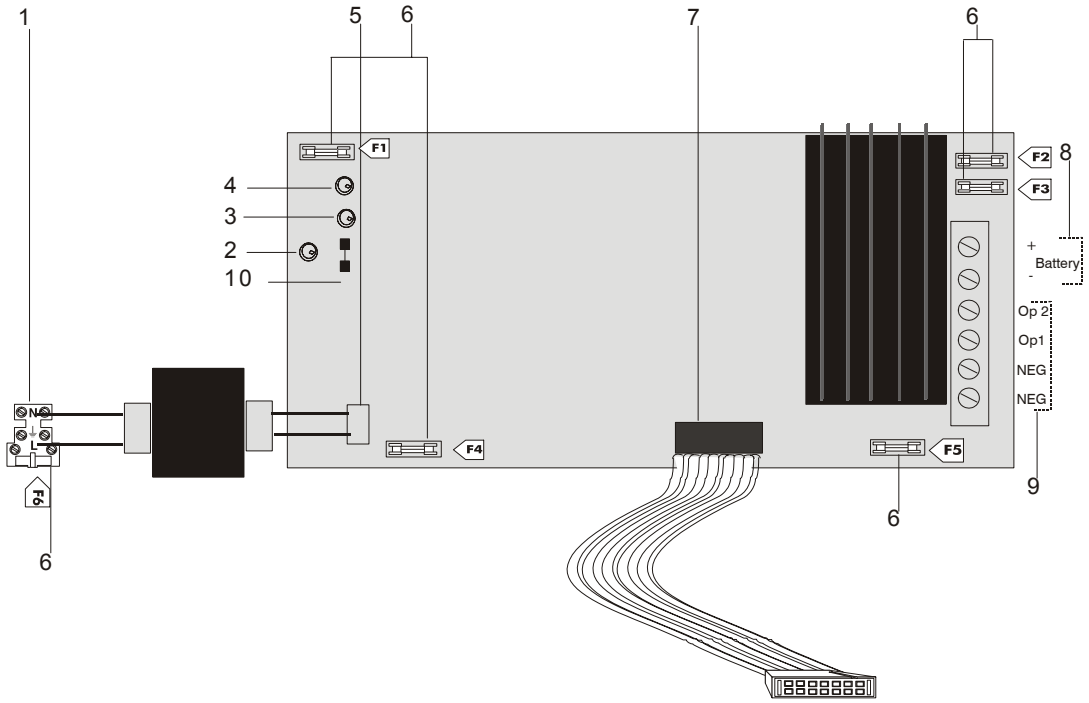

Figure 2: 3 Amp Intellipower Power Supply Unit

1. **Mains/A.C. block terminal**
2. **Power On LED**
3. **Load On LED**
4. **Battery On LED**
5. **Transformer connection**
6. **Fuses** – see fuse table below
7. **PSU to controller connection** (supplied)
8. **Battery Pos/Neg terminals**
9. **Output**
10. **PSU standalone link** (remove LK1 to enable battery monitoring)

Fuse (20mm)	3Amp
F1 Battery	3.15A Quick Blow
F2 Output 2	2A Quick Blow
F3 Output 1	2A Quick Blow
F4 On Board Mains	3.15A Quick Blow
F5 Controller/CiTeC II	500mA Quick Blow
F6 Mains/AC	250mA Anti Surge

1.3 CiTeC II PCB

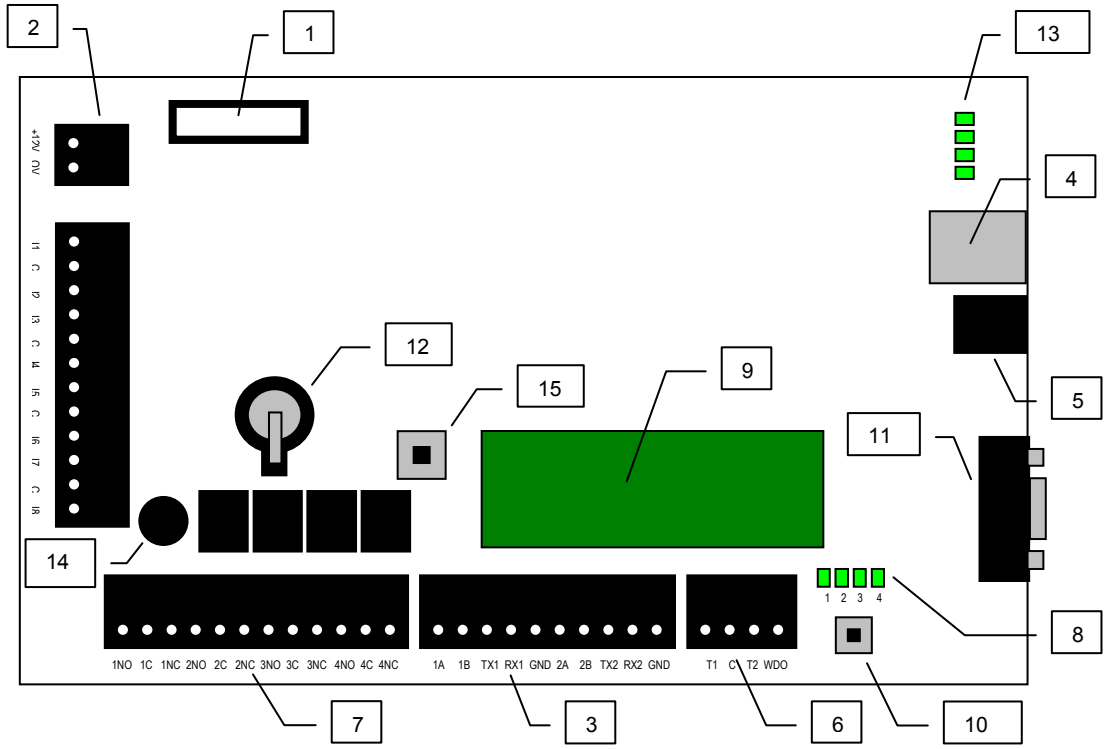

Figure 3: CiTeC II PCB

1.3.1 CiTeC II PCB connections

1	**Power Supply**	14-way ribbon connector used in conjunction with Europlex 3 Amp Intellipower PSU. When CiTeC II is used with Europlex 3 Amp PSU, it provides monitoring of the PSU Mains and Battery connection as well as PSU fuse and current monitoring.
2	**Alternative Power supply**	Alternative 12V DC power supply input. Used where a separate 12V power supply is used to power CiTeC II. In this case CiTeC will not provide any monitoring of PSU Mains and battery etc.
3	**Serial Port Connection**	Provides connection to 3GS panel Serial port. Connect 3GS panel to Serial Port 1 on CiTeC II – that is to pins TX1, RX1 and GND.
4	**Ethernet Connection**	Provides connection to LAN/WAN through a standard CAT5 Network cable terminated with RJ45 connectors.
5	**Telephone Line**	For connection of PSTN telephone line via RJ11 connector.
6	**Tamper Connections**	CiTeC II Normally Closed Front and Back tamper connections. Front tamper connects between T1 and C, and back tamper between T2 and C.
7	**4 On-board Relay Outputs**	**Output 1:** Activates in case of a total comms error to eCOMengine. **Output 2:** Activates if connection to 3GS panel is lost. **Output 3:** Activates if front or back tamper are opened. **Output 4:** Activates in case of a system fault.

8	**Status Indication LED's**	4 LED's provide indication of IP, Panel, modem and watchdog status as follows: **LED 1: Watchdog led** Flashes twice every second in normal operation **LED 2: IP Status** Used to display Network Status as follows: On if IP polling is active Off if IP polling is not active **LED 3: Modem Status** Used to display Modem Status as follows: On if Modem is Functioning correctly Flashing at half the rate of LED 1 when Modem is receiving data Flashing at same rate as LED 1 when Modem is connected. Off if Modem has developed a fault or phone line has become disconnected **LED 4: Panel Comms** On if Serial port communications to 3GS panel is up
9	**On-board Modem**	On-board V92 PSTN or GSM Modem.
10	**Reset Switch**	Press momentarily to reset CiTeC II.
11	**Console Serial Port**	Used for tracing debug information. See Section 6 for further details.
12	**Clock Backup battery**	3V DC cell battery used to back up Date and Time in the event of total power failure to CiTeC II.
13	**Ethernet Status LED's**	4 LED's provide Ethernet Status information as follows: **LED 1: LINK** LED On – Indicates presence of an Ethernet link LED Flashing – Indicates Ethernet activity **LED 2: 10/100** LED Off – Indicates presence of a 10Mbps Ethernet network LED On – Indicates presence of a 100Mbps Ethernet network **LED 3: DUPLEX** LED Off – Indicates a Half Duplex Ethernet connection LED Off – Indicates a Half Duplex Ethernet connection **LED 4: COLLISION** Flashes if there is a collision on the network
14	**System Buzzer**	System Buzzer operates as follows: Two short beeps on power up Two long beeps on detection of IP polling Three long beeps on IP polling fail
15	**Front Tamper switch**	Can be used instead of Tamper connections T1 and C. In this case connection at T1 and C should be left open-circuit.

2 Connecting CiTeC II to 3GS Panel

CiTeC II is connected to 3GS System as shown in diagram below. CiTeC II can be connected to any available serial port on the 3GS Controller. It is recommended that the Serial cable connecting CiTeC II to the Panel should not exceed 10 metres.

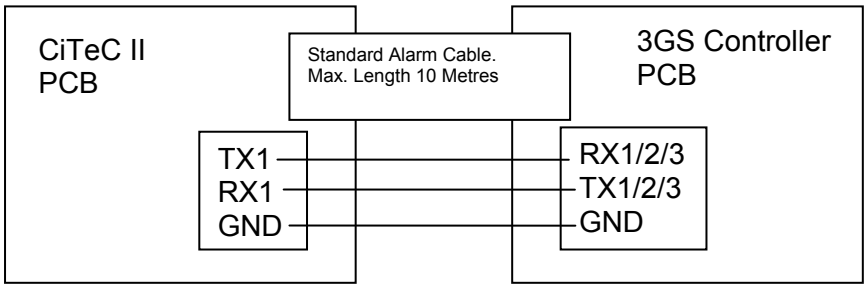

Figure 4: CiTeC II Serial port Connection

2.1.1 3GS Serial Port Configuration

The 3GS Serial Port must be configured for No Parity, 8 Data Bits and 1 Stop Bit (**N, 8, 1**). The baud rate can be set to any value, as the CiTeC II will automatically detect this, although it is recommended to set the baud rate to the highest possible value (**19200**). The other Serial Port settings on 3GS should be set as follows:

Printer:	No
Pager:	No
Log Filter:	32767
Access Filter:	255
System ID:	1
Access Control:	31
Autodial ID:	0
Dial Mode:	0

To Enter Serial Port Setup menu on 3GS:

1) Enter **<ENGINEER CODE> <SHIFT> <8>** on 3GS Keypad. The following screen is displayed:

PORT 1	2400	E,8,1
UNSET	HALF	HELP

2) Press **<UNSET>** to select the Serial Port that CiTeC II is to be connected to.

3) Press **<HALF>** to select the Baud Rate.

4) Press **<HELP>** to select Parity, Data Bits and Stop Bits. Set this to N, 8, 1.

5) Press **<#>** to scroll through the other Serial Port Settings. Printer and Pager Settings should both be set to **NO**. Press **<NO>** to select, followed by **<#>**. All other settings can be entered by inputting the correct number followed by **<#>**. See above for correct settings.

6) Press **<NO>** twice to exit Serial Port Setup.

2.1.2 3GS Setup

In order for all events to be reported correctly to the CS, output logging on 3GS must be set to **1**. To do this, select **<Engineer Code> <Shift> <Part>** to enter into the **ZONES/DOORS/ VARS** menu. Press **<Help>** to select Variables. Use **<Unset>** and **<Part>** keys to scroll through Variables and ensure that Output Logging is set to 1 or YES depending on software version.

2.2 Powering CiTeC II

Once all necessary connections have been made to CiTeC II PCB, power may be applied via 14-way ribbon cable from Europlex Intellipower PSU or from an alternative 12 Volt DC Power Supply. CiTeC II will take approximately 10 seconds to initialise. Initialisation will be characterised by 2 short beeps and LED 1 flashing twice every second.

Once 3GS panel serial port has been configured correctly and connected to CiTeC II, LED 4 will be lit. LED 3 will be lit if there is a modem installed on CiTeC II. LED 2 will not light until IP polling has been set up on CiTeC II and a link to the eCOMengine has been established.

The unit is now ready to be configured. The following chapter details all configuration options.

Once the unit has been configured it may require to be reset (depending on which configuration options have been modified).


NOTE

Every time the unit is reset, it will not report any alarm events to the CS for the first 30 seconds.

2.2.1 Factory Default CiTeC II unit

If the unit is not factory defaulted and its IP address or Login information is not known, it can be factory defaulted by resetting the unit then holding reset switch in position “B” for 5 seconds. LED 1 will start flashing fast when unit has been returned to factory default settings. Unit should then be reset again.

If Login information is known but IP address of unit is not known it is possible to retrieve this IP address without having to factory default unit. See section 6 “Tracing” for more information.

3 Configuring CiTeC II

CiTeC II has a resident Web Server, so can be configured using a standard web browser. Therefore, in order to configure CiTeC II, a network connection must be established with the unit. This connection can take place in the following ways:

1) Via a direct link to the CiTeC II unit, from a PC with a network card installed, using a Straight through or Crossover Network Cable (see below for pin outs).

2) Via a network link over a LAN/WAN or Ethernet Hub/Switch, from a PC with a network card installed, using a straight through network cable (see below for pin-outs).

The factory default IP address of the CiTeC II unit is: **192.168.1.1**. The default Subnet Mask of the CiTeC II unit is **255.255.255.0**.

3.1 Configuring PC IP address

In order to establish Network communications from the PC to CiTeC II, both the PC and CiTeC II must be on the same IP range – that is, the IP address of the configuring PC must be set to 192.168.1.X, where X is any number between 1 and 255 (for example, use 192.168.1.2).

To set this IP range on the configuring PC:

- Double-click **Network and Dial up Connections** in the Control Panel and select your **active** Network connection **Local Area Connection**.
- Right-click this connection and select **Properties**.
- In Properties, select **Internet Protocol (TCP/IP)** and click the **Properties** button.
- Select the **Advanced…** button and under **IP Addresses** in the **IP Settings** Tab, select the **Add** button.
- Add IP address and subnet mask here. Subnet mask should be set to 255.255.255.0.

The PC and CiTeC II unit are now on the same IP range, so no further settings need to be enabled.

3.2 Network Cable Wiring

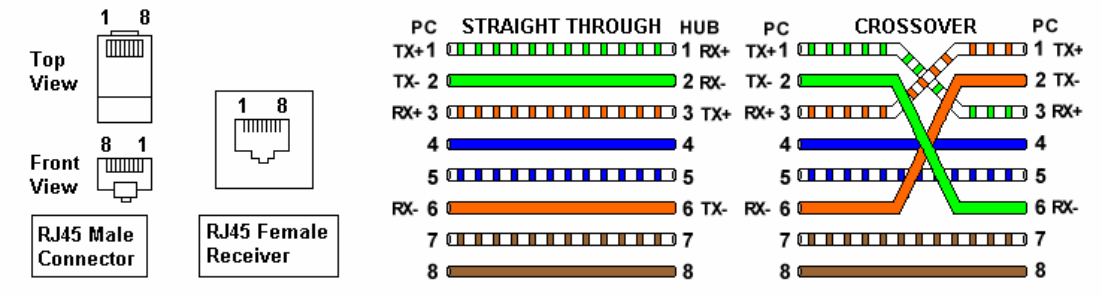

Figure 5: Network Cable Wiring

3.3 CiTeC II Web Browser Configuration Utility

CiTeC II has a resident Web Server which allows an Engineer secure access to configuration settings using a standard Web Browser. Due to some issues with Microsoft Internet Explorer browser, Europlex recommends the use of Mozilla Firefox browser for this purpose. This browser is available from http://www.mozilla.org/products/firefox/.

When connecting to CiTeC II for the first time, the unit will be factory defaulted, so simply open up a browser and type the IP address (192.168.1.1) of the CiTeC II unit in the address bar, then press “Return” on keyboard. The following screen with login prompt will be displayed:

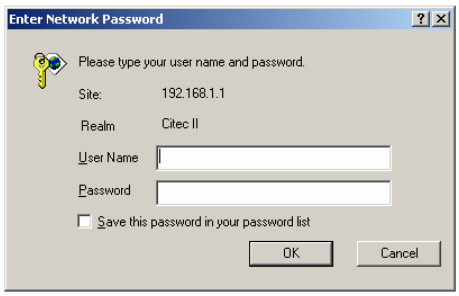

Figure 6: CiTeC II Login Screen

The default User Name (which is case sensitive) is: **Master**.

The default password is: **111111**

Enter the default user name and password and select **OK** to enter the CiTeC II configuration browser. The default user name and password can be changed at a later stage, and three other users can also be configured.

If an incorrect user name or password is entered, the login prompt will be displayed again. After three failed login attempts, no more login prompts will be displayed and the above procedure must be repeated.

3.4 CiTeC II Status Screen

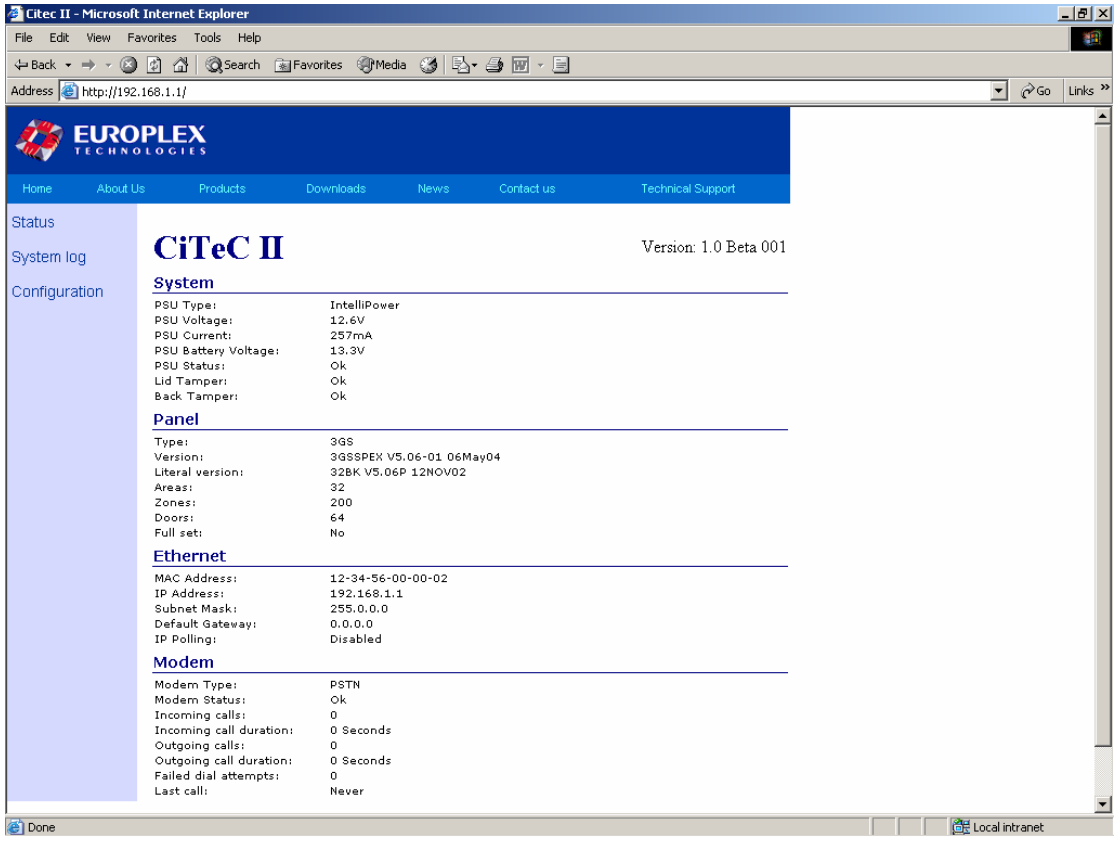

Figure 7: CiTeC II Status Screen

Once connected to CiTeC II, the Status screen is the first screen encountered in the Configuration browser. Navigation of menus is controlled using the links on the left-hand side of the screen (Home, System Log, Configuration), and selecting appropriate tabs in the main screen where applicable. There are also links across the top of the screen which will provide access to the Europlex homepage and to product listings and technical support links. These links will only be accessible if the configuring PC has Internet access.

The status screen has information on the CiTeC II system status as detailed below:

3.4.1 System

Contains information on the system status, such as PSU and tamper status, and so on.

3.4.2 Panel

Contains information on 3GS Panel type and software version, panel status, panel zones, armed status, and so on.

3.4.3 Ethernet

Contains information on CiTeC IP and MAC address, Subnet Mask, Gateway address and Ethernet polling.

3.4.4 Modem

Contains information on Modem Type and Status. Also shows number and duration of calls made and received.

3.5 System Log Screen

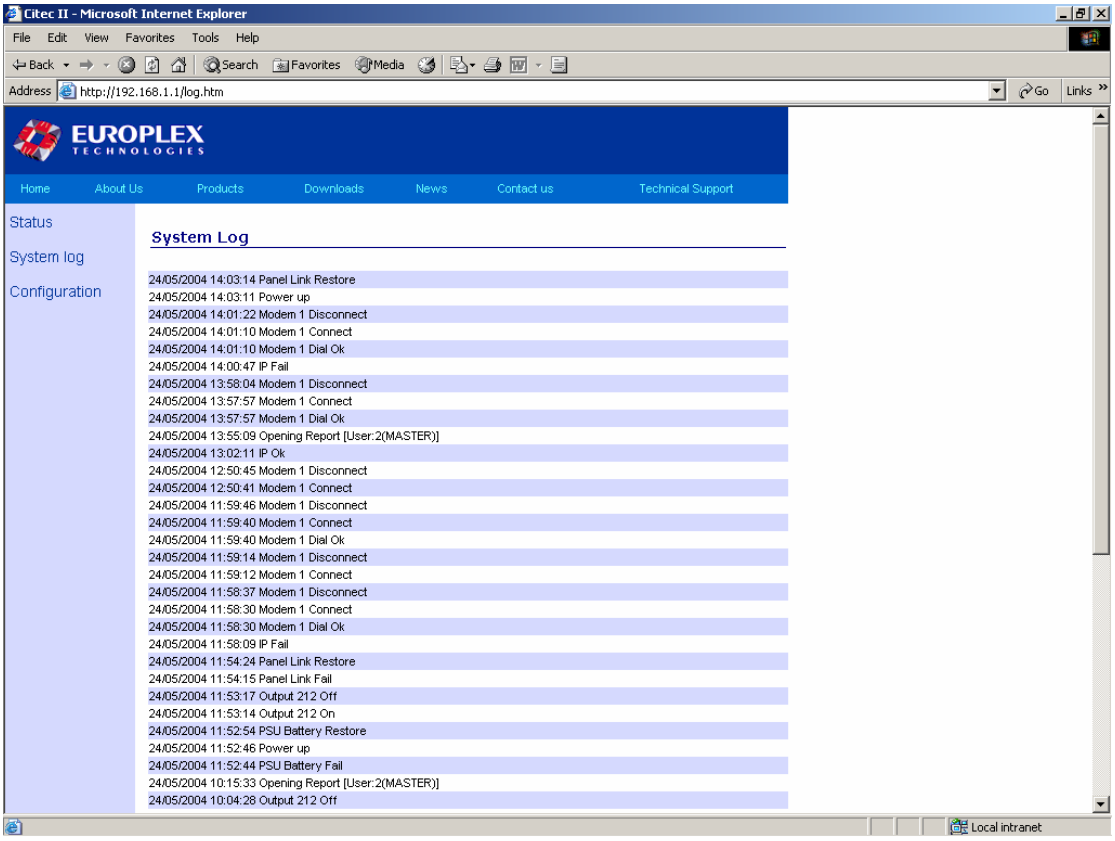

Figure 8: CiTeC II System Log Screen

The System Log screen shows the tail end of the CiTeC II log (approximately 50 events). This log logs all events from IP and Modem status to System Arming/Disarming, Alarm events, and so on.

To see more log events, scroll down and press the **More** button. This will show the last 100 events. To see all log events, scroll down and press the **All** button. This will show all log events. Note that this may take some time depending on how many events are in the log.

There is also a feature to save the entire System log. To do this, scroll down and press the **Text File** button. This will download the entire System log in a new page in the browser. When the log has fully downloaded, select **File->Save As**, choose a name for the log file and save the file as a text file (*.txt).

3.6 Configuration Screen – System Settings

Click **Configuration** on the left hand side of the screen. The first screen shown is the System Settings screen, and is the first of 8 configuration screens. The other configuration screens are accessed by clicking on the appropriate menu link – also on the left hand side. These allow configuration changes to be made to CiTeC II, and are grouped according to Network settings, Modem Settings, and so on.

To change a setting, modify text in the appropriate box or choose an option from a drop-down list where appropriate. When all required settings have been configured, select the **Update** button to update changes made to CiTeC II configuration.

When all necessary configuration changes have been made, these changes must be saved. This **Save** option is available in the **File Operations** menu – see section 3.13 for details.

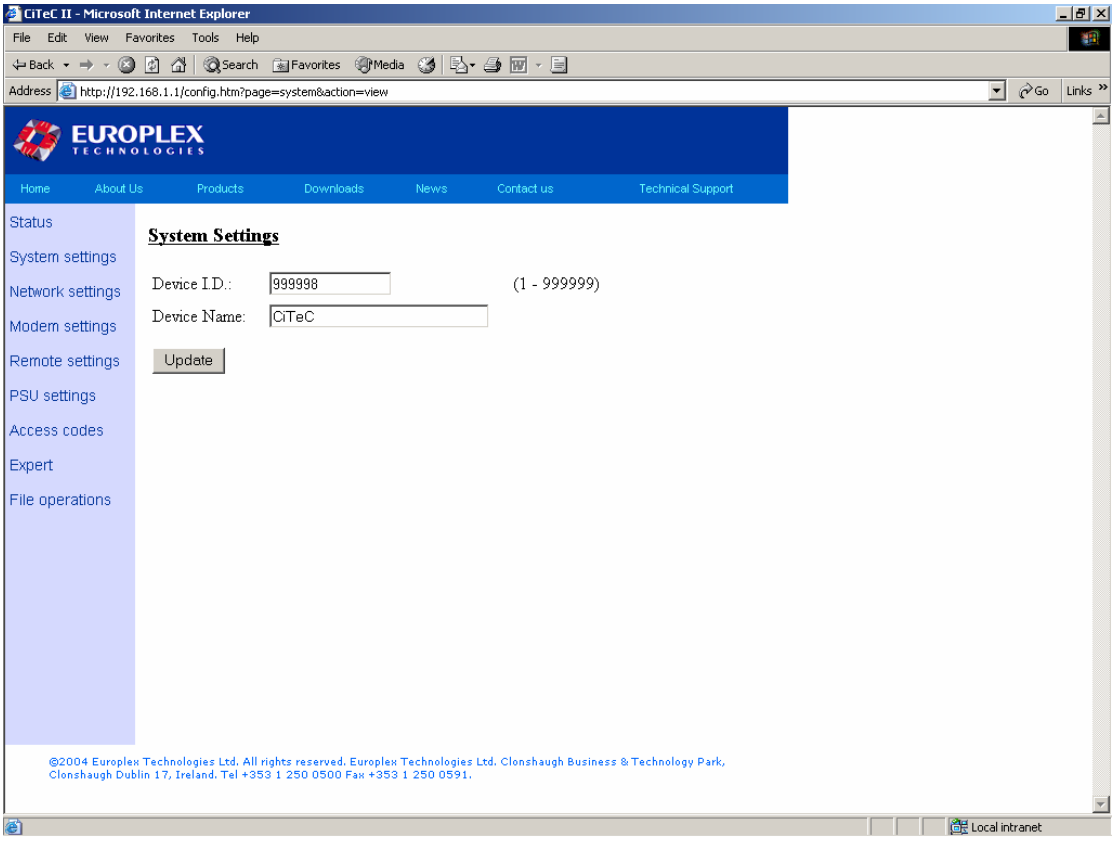

Figure 9: System Settings Screen

3.6.1 Device I.D.

Each CiTeC II unit must be configured with a unique Device ID. This ID is used in all communication to the eCOMengine Server to identify the unit. The same ID will be entered for this site at the eCOM PRO Event handler Client. This ID should be allocated by the Central Station to ensure that no duplication occurs. The value of this ID can be set from 1 to 999999. It is recommended not to set this ID to 1 because the ID of the eCOMengine Server is set to 1 by default. This means that all events within eCOMengine Server – that is, Server Started/Stopped events – will have ID 1.

3.6.2 Device Name

Name of the Installation where CiTeC II is being installed.

3.7 Network Settings

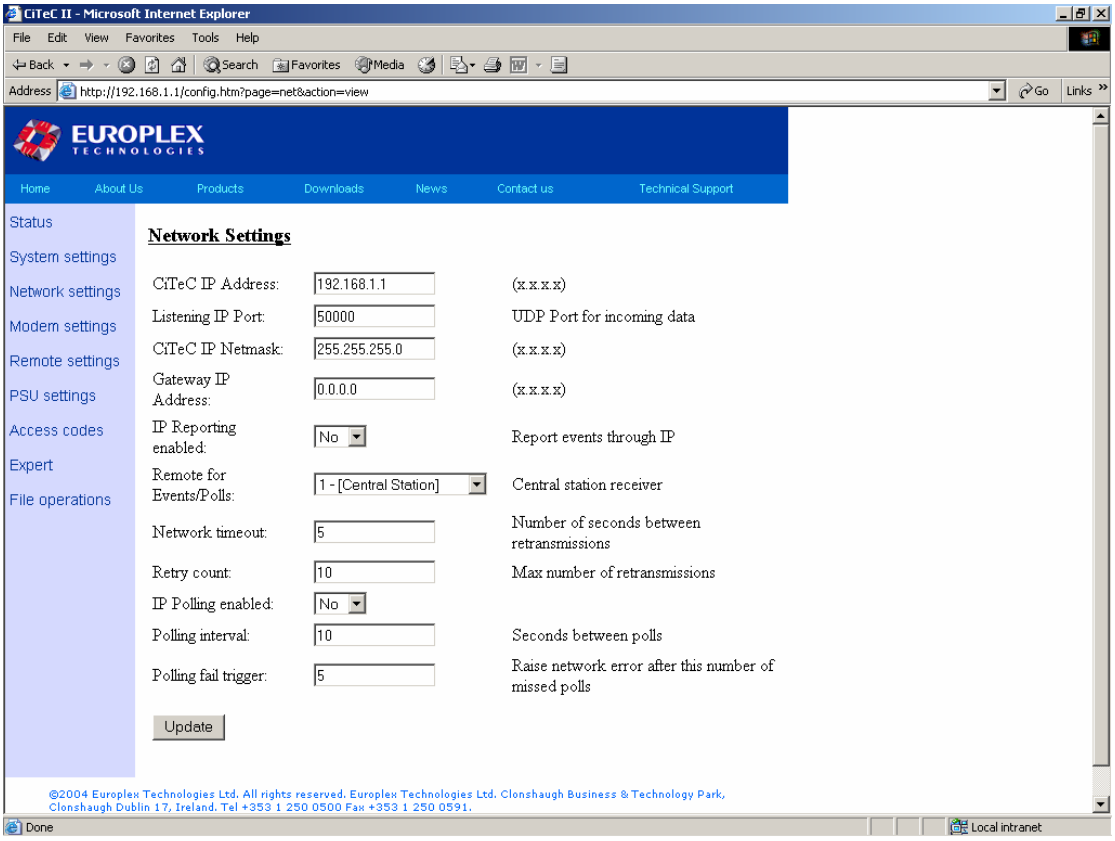

Figure 10: Network Settings Screen

Settings 3.7.1 to 3.7.4 should be supplied by the network administrator of the site where the CiTeC II unit is to be installed. None of these settings will take effect until the CiTeC II unit has been reset – see section 3.13 File Operations for details.

3.7.1 CiTeC IP Address

IP address of the CiTeC II unit. Change this IP address to an unused IP address on the network on which CiTeC II is being installed. Ensure that the configuring PC has the same IP address range, otherwise once CiTeC II is reset, a network connection will not be able to be established to it.

3.7.2 Listening IP Port

The CiTeC II will listen for UDP packets on this port. Set to 50000 by default.

3.7.3 CiTeC IP Netmask

Subnet mask of the CiTeC II unit. Set to 255.255.255.0 by default.

3.7.4 Gateway IP Address

Gateway address to use on the local network to which CiTeC II is connected. Leave blank (0.0.0.0) if CiTeC II is on the same local network as the central station.

3.7.5 IP Reporting Enabled

Set to **Yes** to allow CiTeC II to report all events via IP to the Central Station receiver. Set to **No** to disable IP reporting of Events.

3.7.6 Remote for Events/Polls

Choose Central Station receiver to send events to and/or receive polls from. Up to four remotes can be configured to receive events from and send polls to CiTeC II. In case of a failure of one of these remotes, CiTeC II will dynamically switch to an alternative remote (if configured) if it receives polls from that remote. An explanation of how to configure remotes is given in section 3.9. It is recommended to leave this set to Remote 1 (default remote) for Central Station primary Receiver.

3.7.7 Network Timeout

Number of seconds between retransmissions of CiTeC II events. When the CiTeC II unit has an event to send, this time interval will establish how often it tries to re-send that event if no acknowledgment is sent by the eCOMengine Server within that time. The default setting for this time interval is five seconds.

3.7.8 Retry Count

Maximum number of CiTeC II retransmissions. This is linked to the Network Timeout setting (see section 3.7.7). If the CiTeC II unit sends an event and the Network Timeout timer expires before an acknowledgment is received from the Central Station, this counter will establish how often it tries to re-send that event. The default setting for this counter is 10 retries. If all retries have failed, the backup channel (PSTN/GSM) will then be activated (if configured). See section 3.8 for details on how to configure Modem settings.

3.7.9 IP Polling Enabled

If set to **Yes**, CiTeC II will expect to receive polling requests from the eCOMengine Server and will reply with poll acknowledgment. If set to **No**, and polling requests from eCOMengine Server will be ignored.

3.7.10 Polling Interval

Polling interval (seconds). This interval establishes how often CiTeC II will expect to receive polls from the ECOMengine via IP. This polling interval should be set to the same time interval at the eCOM Client software so that when a poll is received by CiTeC II, it will respond with an acknowledgment and will not expect another poll until this timer has elapsed, at which time the eCOMengine will then send another poll.

3.7.11 Polling Fail Trigger

The number of polling intervals – with no polls – which triggers a network error. This is linked to the Polling Interval setting (see section 3.7.10). The default setting for Polling Interval is 10 seconds, and the Polling Fail Trigger default value is 5. Therefore if the network link to eCOMengine Server is lost, CiTeC II will trigger an IP Fail after 50 seconds (10 seconds x 5 triggers). The backup channel (PSTN/GSM) will then be activated (if configured).

NOTE

If any of the above settings are modified, press the **Update** button to update changes to CiTeC II.

3.8 Modem Settings

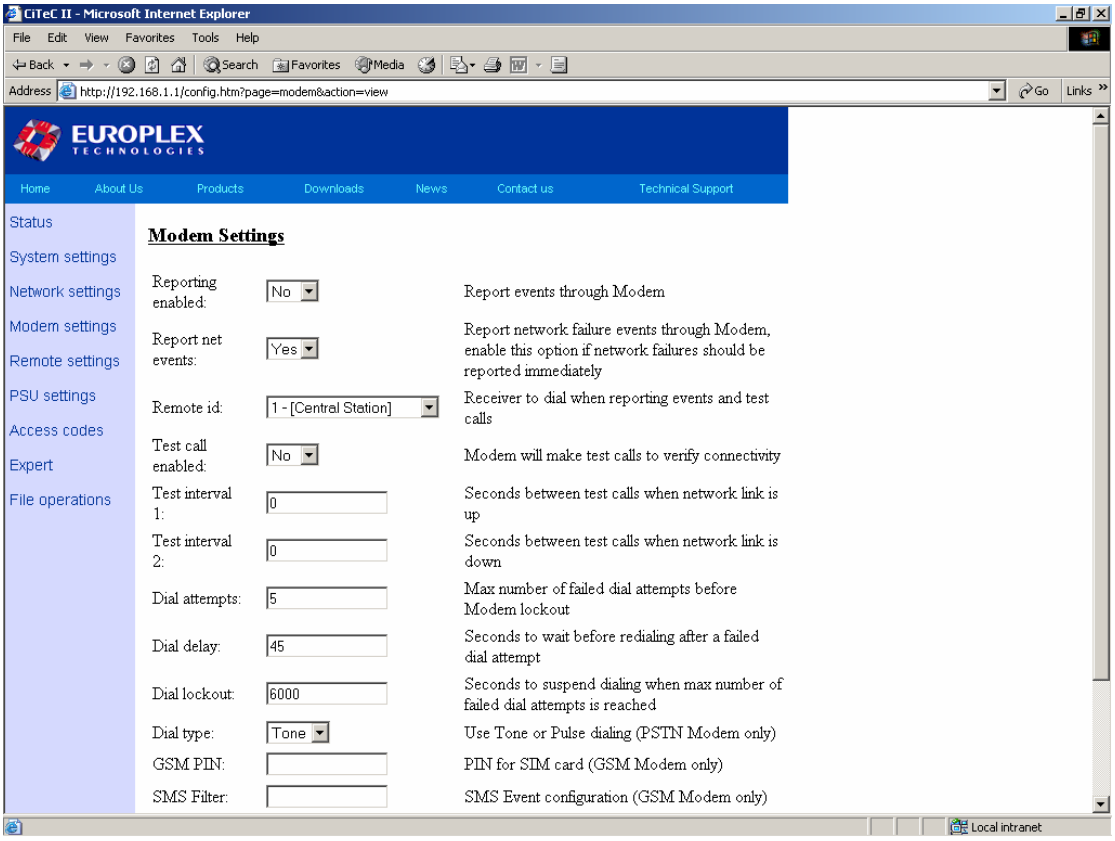

Figure 11: Modem Settings Screen

3.8.1 Reporting Enabled

Set to **Yes** to allow CiTeC II to report events via Modem to the Central Station. Set to **No** to disable Modem reporting of Events. Modem reporting of events will occur in case of IP polling fail.

3.8.2 Report Net Events

Report network failure events through Modem channel. Set this option to **Yes** if network failures should be reported immediately via Modem. Set to **No** if network failures should be reported by modem only after IP polling has failed.

3.8.3 Remote I.D.

Choose Central Station receiver to receive Modem Events. Up to four remotes can be configured to receive modem events from CiTeC II – see section 3.9. It is recommended to leave this set to Remote 1 (default remote) for Central Station primary Receiver.

3.8.4 Test Call Enabled

CiTeC II can be configured to perform modem test calls at specified intervals to the Central Station receiver when the Network Link is up and also when it is down. Set to **Yes** to allow CiTeC II to perform Modem test calls. Set to **No** to disable Modem test calls. This setting is used to confirm that Modem channel is capable of being activated if required. The IP Reporting Enabled (see section 3.7.5) and the Remote for Events/Polls settings (see section 3.7.6) set intervals for Modem Test call.

NOTE If Modem Reporting is disabled, test calls will not be transmitted.

3.8.5 Test Interval 1

Modem Test Call interval when Network link to eCOM engine is OK (in seconds).

3.8.6 Test Interval 2

Modem Test Call interval when Network link to eCOM engine is down (in seconds).

3.8.7 Dial Attempts

Maximum number of attempts to dial a central station receiver before the modem is locked out. See the IP Polling Enabled setting (section 3.7.9).

3.8.8 Dial Delay

Number of seconds to wait between failed dial attempts. Note that this delay only comes into effect after a failed dial attempt. The first dial attempt will happen immediately after the CiTeC II unit has detected that the IP link has failed, or when a test call is scheduled.

3.8.9 Dial Lockout

When the maximum number of dial attempts has been exceeded, then this timer will start and the modem will not attempt to dial until this timer expires. Note that once this timer starts, it can only be stopped by resetting the CiTeC II unit. CiTeC II will be able to receive incoming calls when the modem is locked out but this will not reset the lockout timer.

3.8.10 Dial Type

Set to **Tone** to enable Modem tone dialling or **Pulse** to enable Modem pulse dialling. This setting is applicable to the PSTN modem option only.

3.8.11 GSM Pin

Used if the GSM Modem option is used with CiTeC II. If SIM Card requires a PIN Number, this PIN Number must be entered here.


NOTE

This PIN Number is blank by default. Ensure that the correct PIN number is entered here, otherwise your SIM card may become blocked!

3.8.12 SMS Filter

Used for reporting certain SIA events via SMS text message to a mobile phone or SMS text message receiver. To report an event, the relevant SIA code should be entered followed by a colon, followed by the mobile number to be dialled – for example, to report a Burglary alarm event type to mobile phone number 1234567, type **BA:1234567** into this string.

To report multiple events, simply separate events by a comma – for example, to report Burglary, Panic and Fire alarm event types to mobile phone number 1234567, type **BA,PA,FA:1234567** into this string.

Different events may be reported to different telephone numbers by entering strings as detailed above but separating strings by using a semi-colon – for example, **BA,FA:1234567;PA:7654321**. In this case, Burglary and Fire Alarm events are reported to mobile phone number 1234567, and Panic events are reported to mobile phone number 7654321.


NOTE

One text message will be generated for every event that occurs. Multiple events cannot be sent via text message for the same event type – that is, a SIA BA type event can only be sent to the first number that it is configured to be sent to in the string entered above. If it is also entered in the second or subsequent number configured, it will not be transmitted to this number. If any of the above settings are modified, press the **Update** button to update changes to CiTeC II.

3.9 Remote Settings

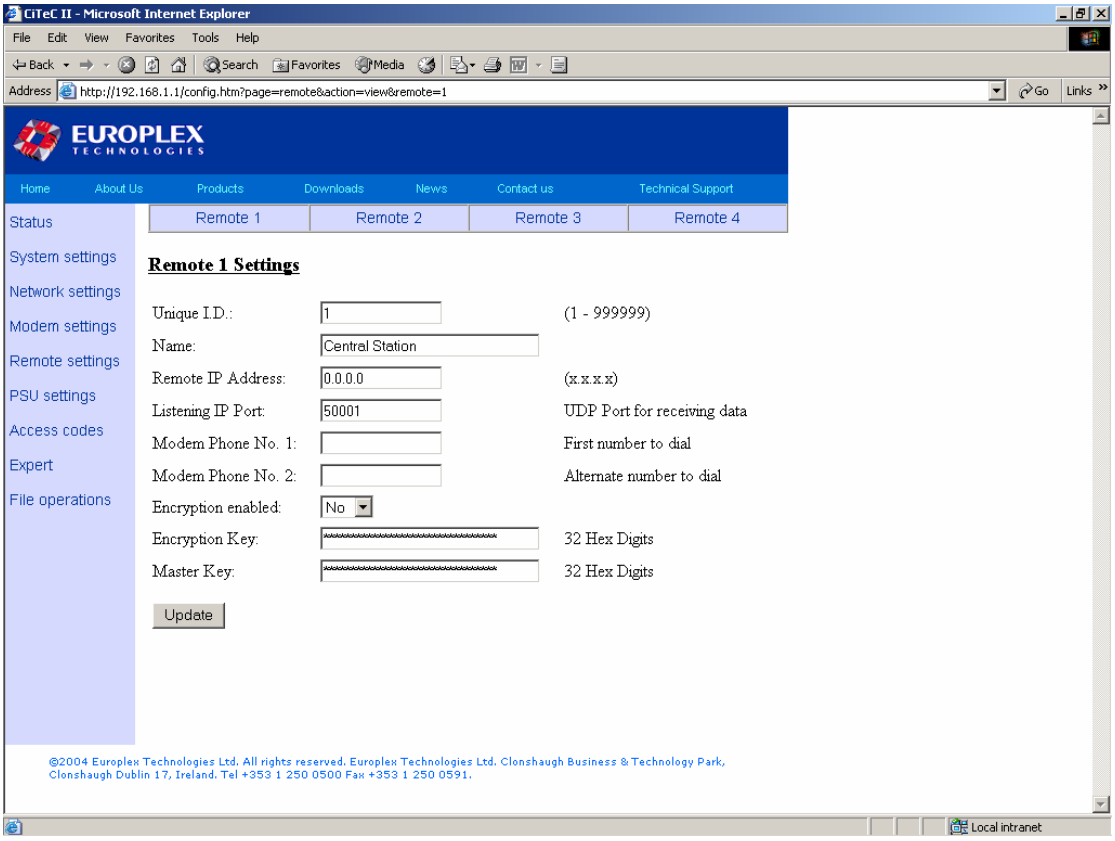

Figure 12: Remote Settings Screen

Up to four remote Central Station receivers can be configured to receive events, Remotes 1-4. To configure remotes, select Remote 1-4 links across top of screen.

Remote 1 is the default Remote used by CiTeC II for receiving polls and sending events to.

Remote 2 is configured to allow CiTeC II configuration tool access to configuration files. It is recommended not to change the settings of Remote 2 until fully familiar with the operation of CiTeC II and eCOMengine, as to do so may cause difficulty when attempting to configure CiTeC II at a later stage.

3.9.1 Unique ID

Unique ID of the Remote Central Station Receiver. The Unique ID of the Remote CS 1 is set to 1 by default. If this ID is changed, the ID at the eCOMengine Server must be changed to the same value. Therefore it is recommended not to change this value until fully familiar with the operation of CiTeC II and eCOMengine.


NOTE

Note that Remote CS 1 should not be set to 0, as this value disables the remote.

The Unique ID of the Configuration tool (Remote CS 2) is set to 999999 by default. This means that the configuration tool must be given ID 999999 to allow it to communicate with CiTeC II. This is not applicable to Web Browser Configuration interface, only CiTeC Test tool. See section 0 for details on how to configure CiTeC II using the CiTeC Test Tool.

To disable a Remote CS, the ID should be set to zero (as is the case in Remote 3 and 4). These unique IDs should be allocated by the Central Station to avoid duplication.

3.9.2 Name

Remote CS Identification. The Name of the CS (Remote CS 1) is set to **Central Station** by default. The Name of the Configuration tool (Remote CS 2) is set to **Configuration Tool** by default. The Names of Remote CS 3 and 4 are blank.

3.9.3 Remote IP Address

IP address of the remote Central Station Receiver. This is the IP address that CiTeC II will send all poll acknowledgments and events to.


NOTE

The IP address of Remote 2 (Configuration tool) is set to 0.0.0.0. If this IP address is changed, configuration of CiTeC II with the configuration tool (CiTeCTest.exe) will not be possible. See section 1 for details on how to configure CiTeC II using CiTeC Test Tool.

3.9.4 Listening IP Port

UDP Port on which the Remote CS is listening. Set to 50001 by default.

3.9.5 Modem Phone No. 1

Telephone number used by CiTeC II to dial this remote. The CiTeC II can be configured with two telephone numbers per central station. These numbers will be dialled in the event of a Network failure or when a PSTN Test Call is required to be performed.

3.9.6 Modem Phone No. 2

Secondary Telephone number. If the first number is not answering or is busy, then the secondary PSTN number is dialled. If this number is not answering or is busy, then Modem Phone No. 1 is dialled again.

3.9.7 Encryption Enabled

Set to **Yes** to enable encryption for this remote. Set to **No** to disable encryption. If Encryption is enabled, then Encryption must also be enabled for this site at eCOM Client software, and the encryption keys must match.

3.9.8 Encryption Key

Encryption key, 128 bit (32 hex digits). If encryption has been enabled (see section 3.9.7), this key is used for all communication to and from CiTeC II to the configured remote central station receiver. A matching key must also be entered for this site at eCOM Client software. This key is not automatically generated by CiTeC II, it must be chosen by the engineer.

3.9.9 Master Key

This key is used when changing encryption keys.


NOTE

If any of the above settings are modified, press the **Update** button to update changes to CiTeC II.

3.10 PSU Settings

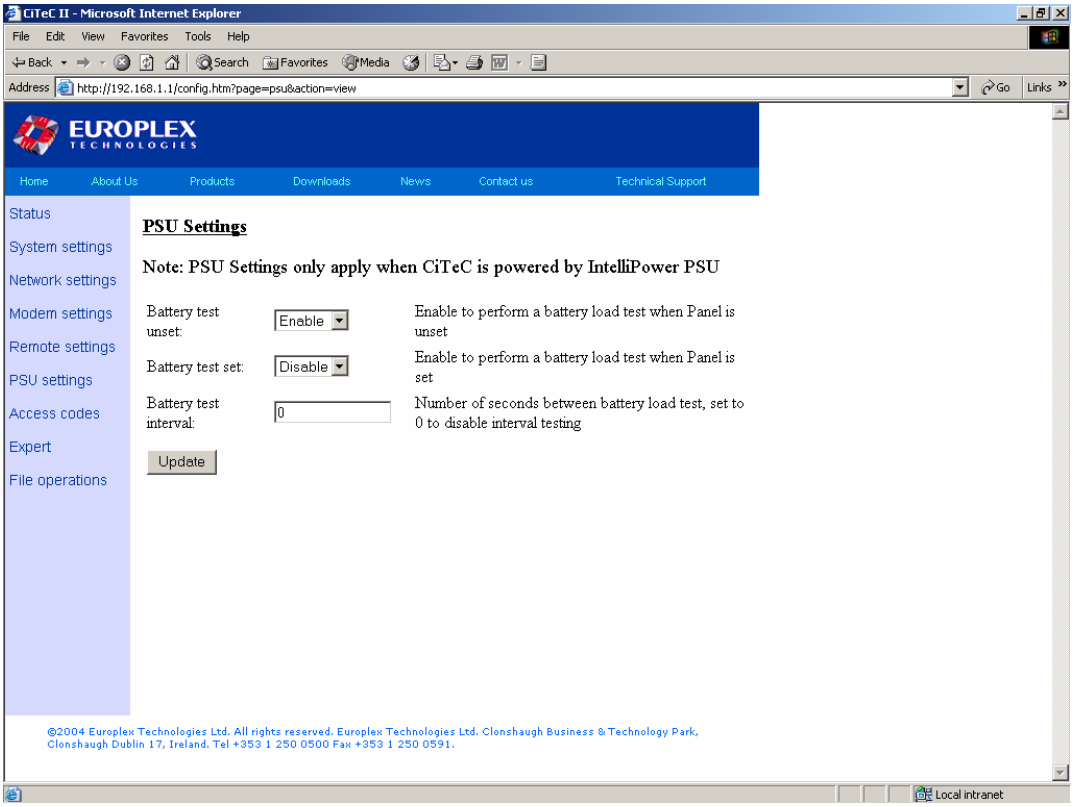

Figure 13: PSU Settings Screen

3.10.1 Battery Test Unset

Set to **Yes** to enable battery load testing at CiTeC II when Panel is disarmed. Set to **No** to disable battery load testing. When the 3GS panel is Unset/Disarmed, this test places a load on the CiTeC II battery for 10 seconds and ensures that the voltage does not drop below 10.5 Volts DC. CiTeC II constantly monitors battery voltage, and so will also signal if battery has become disconnected or develops a fault.

NOTE	Battery is only tested when Panel goes from an Armed state to a Disarmed state.

3.10.2 Battery Test Set

Set to **Yes** to enable battery load testing at CiTeC II when Panel is armed. Set to **No** to disable battery testing. When the 3GS panel is Set/Armed, this test places a load on the CiTeC II battery for 10 seconds and ensures that the voltage does not drop below 10.5 Volts DC. CiTeC II constantly monitors battery voltage, and so will also signal if battery has become disconnected or develops a fault.

NOTE	Battery is only tested when Panel goes from a Disarmed state to an Armed state.

3.10.3 Battery Test Interval

Number of seconds between battery load tests. Set this interval to enable periodic load testing of battery. Set to zero to disable interval testing of battery.

NOTE	If any of the above settings are modified, press the **Update** button to update changes to CiTeC II.

3.11 Access Codes

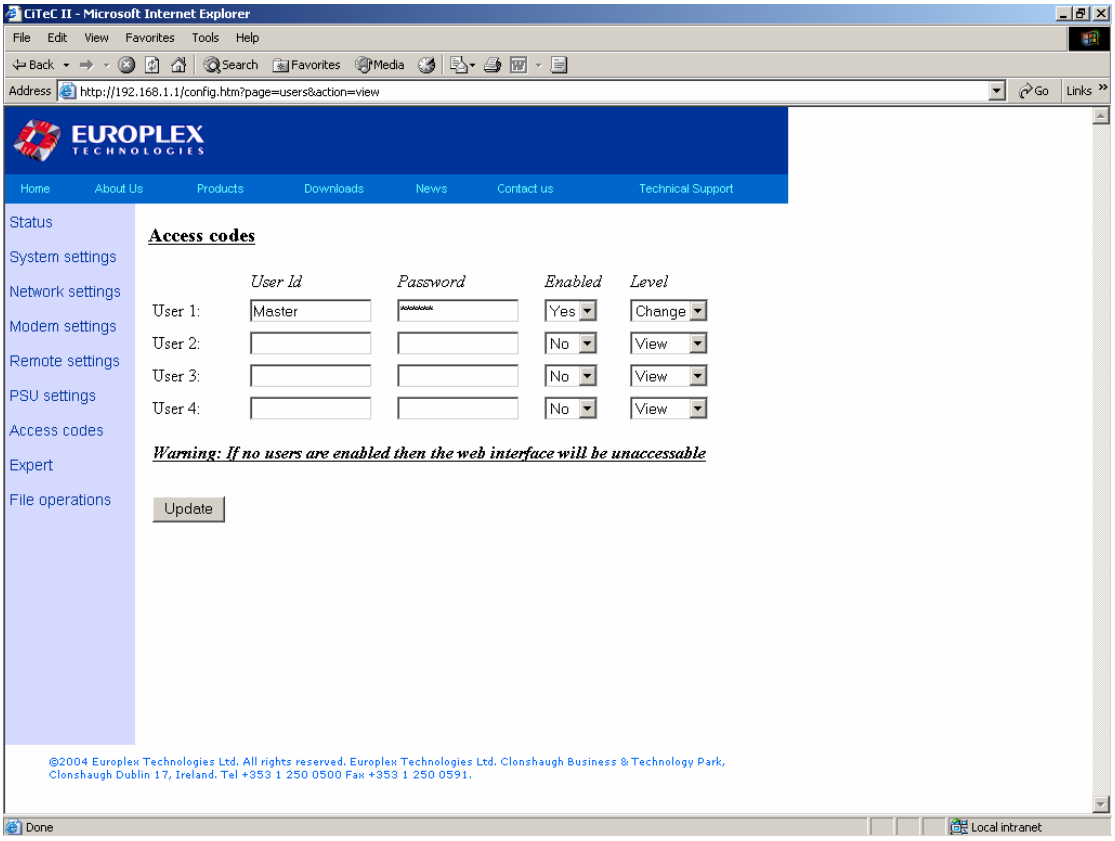

Figure 14: Access Codes Screen

This Section allows the Master User to change their User ID and password for configuring CiTeC II using the web browser, and to set up other users on the system.

3.11.1 User 1

Default Master User. Default User ID: **Master**, Default Password: **111111**. Note that User ID is Case sensitive.

Set Enabled to **Yes** to allow this user to access CiTeC II configuration. Set Enabled to **No** not to allow this user to access CiTeC II Configuration.

Set Level to **Change** to allow this user to make configuration changes to CiTeC II, otherwise set Level to **View** to allow this user to only view System status and log information on CiTeC II.

3.11.2 User 2 – User 4

The Master User can also set up three extra User IDs and passwords, enable or disable these User IDs, and set up User levels – that is, allow these extra users to view system status and log only, or allow these users to change configuration settings. Passwords may be numeric or text based or a combination of both. Text passwords are case sensitive.

NOTE

If no Users are Enabled, then the web interface will be inaccessible. Once changes are made to user settings and have been updated, these changes will take effect immediately – if the Master User changes Enabled to No or Level to View, they will instantly be locked out of configuration and will not be able to regain access.

If any of the above settings are modified, press the **Update** button to update changes to CiTeC II.

3.12 Expert Mode

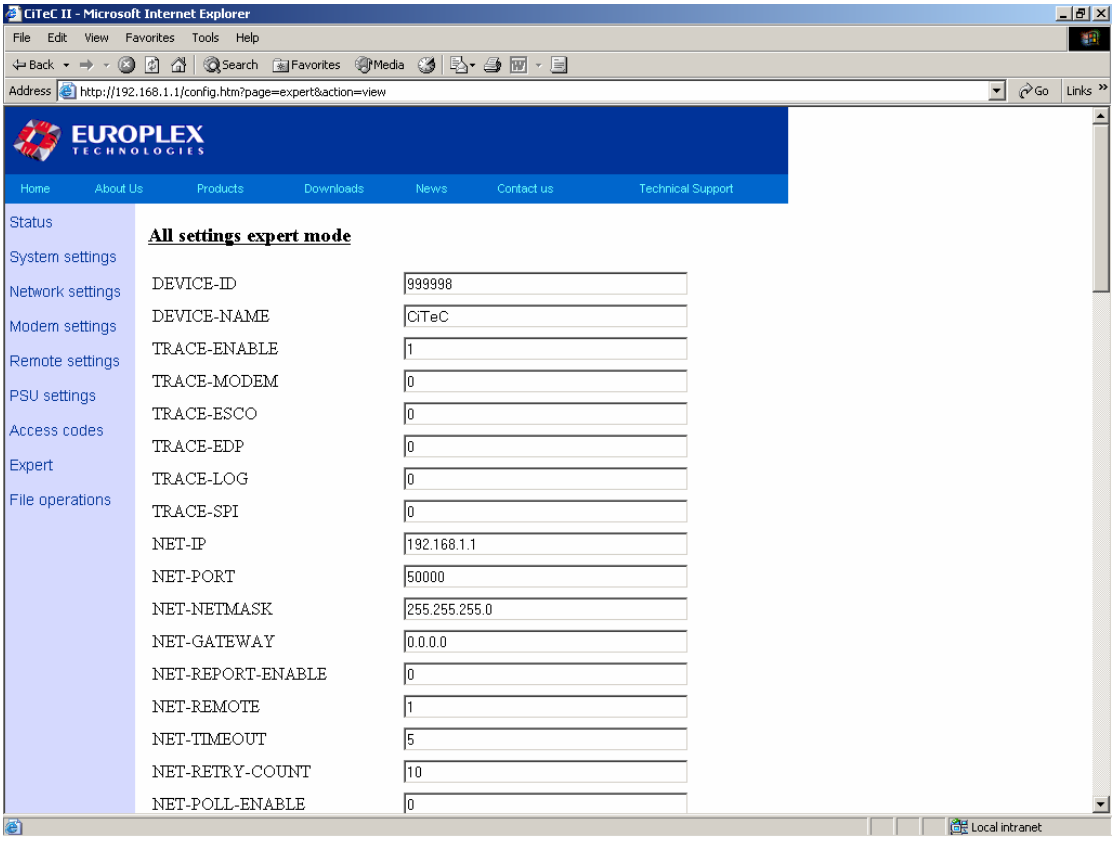

Figure 15: Expert Mode Screen

This screen allows an Expert User to configure every possible setting within CiTeC II configuration all in one screen. Use the scroll bar on the right of screen to scroll through settings.

It is recommended that you do not attempt to configure CiTeC II using this screen unless you understand every single configuration setting and the possible affect it may have on the system.

Note that the setting tags in Expert Mode are different to the setting tags in the other configuration screens detailed. The following table outlines how the settings correspond to each other.

Expert Mode Tags	Configuration Screens Tags
DEVICE-ID	Device I.D
DEVICE-NAME	Device Name
HTTP-ENABLE	N/A*
HTTP-PORT	N/A*
TELNET-ENABLE	N/A*
TELNET-PORT	N/A*
TRACE-ENABLE	N/A*
TRACE-MODEM	N/A*
TRACE-ESCO	N/A*
TRACE-EDP	N/A*
TRACE-LOG	N/A*
NET-IP	CiTeC IP Address
NET-PORT	Listening IP Port (In Network Settings)

Expert Mode Tags	Configuration Screens Tags
NET-NETMASK	CiTeC IP Netmask
NET-GATEWAY	Gateway IP Address
NET-REPORT-ENABLE	IP Reporting Enabled
NET-REMOTE	Remote for Events/Polls
NET-TIMEOUT	Network Timeout
NET-RETRY-COUNT	Retry Count
NET-POLL-ENABLE	IP Polling enabled
NET-POLL-INTERVAL	Polling interval
NET-POLL-TRIGGER	Polling fail trigger
MODEM-DIAL-WAIT	Dial delay
MODEM-DIAL-ATTEMPTS	Dial attempts
MODEM-DIAL-FAIL-WAIT	Dial lockout
MODEM-DIAL-PULSE	Dial type
MODEM-REPORT-ENABLE	Reporting Enabled
MODEM-REMOTE	Remote id
MODEM-TEST-ENABLE	Test call enabled
MODEM-TEST-NET-UP	Test interval 1
MODEM-TEST-NET-DOWN	Test interval 2
MODEM-PIN	GSM PIN
MODEM-SMS-FILTER	SMS Filter
SIA-OUTPUT-MODE	N/A*
SIA-OUTPUT-FILTER	N/A*
PSU-BATTEST-SET	Battery test set
PSU-BATTEST-UNSET	Battery test unset
PSU-BATTEST-INTERVAL	Battery test interval
REMOTEn-ID	Unique I.D.
REMOTEn-NAME	Name
REMOTEn-IP	Remote IP Address
REMOTEn-PORT	Listening IP Port (in Remote Settings)
REMOTEn-ENCRYPTION	Encryption enabled
REMOTEn-KEY	Encryption Key
REMOTEn-MASTER KEY	Master Key
REMOTEn-MODEM NUMBER 1	Modem Phone No. 1
REMOTEn-MODEM NUMBER 2	Modem Phone No. 2
USER-1	User 1
USER-2	User 2
USER-3	User 3
USER-4	User 4

*HTTP settings, TELNET settings, Trace settings, SIA settings and Modem SMS Limit setting are only accessible in Expert Mode.

Tracing

See section 6 for details on tracing.

3.12.1 SIA Output Mode

Set to **0** not to report any 3GS panel output state changes as SIA events. Set to **1** to report all 3GS panel output state changes as SIA events. Set to **2** to report chosen panel output state changes as SIA events. Output numbers required to be reported should be set using the **SIA Output Filter** setting.

3.12.2 SIA Output Filter

This bit wise variable string is used when deciding which output state changes to report as SIA events to eCOM Client. To report an output number, set its relevant bit to **1**, otherwise set its relevant bit to **0** not to report it as a SIA event.

For example, to report output numbers 1, 2, 7, 15, and 30 to eCOM client as SIA events, the following string should be entered: 11000010000000100000000000000001 – that is, set bits 1, 2, 7, 15, and 31 to **1** and set all other bits to **0**. The string may be terminated after the last output bit has been set to 1.


NOTE

The SIA Output Mode setting (see section 3.12.1) must also be set to 2 for this feature to work correctly.

3.12.3 Non Reporting of Certain 3GS SIA Events

In order not to report a particular 3GS SIA event to the Central Station receiver, the Phone Option for that particular event within the 3GS controller SIA database should be set to 0 and 0. This SIA database can be accessed through Panelman for Windows software, or by entering **<Engineer Code> <Shift> <Shift> <NO>** on the 3GS keypad. In the case of the latter, use the **<UNSET>** key to choose the SIA Event and use the **<HELP>** key to set the Phone Option.


NOTE

If any of the above settings are modified, press the **Update** button to update changes to CiTeC II.

3.13 File Operations

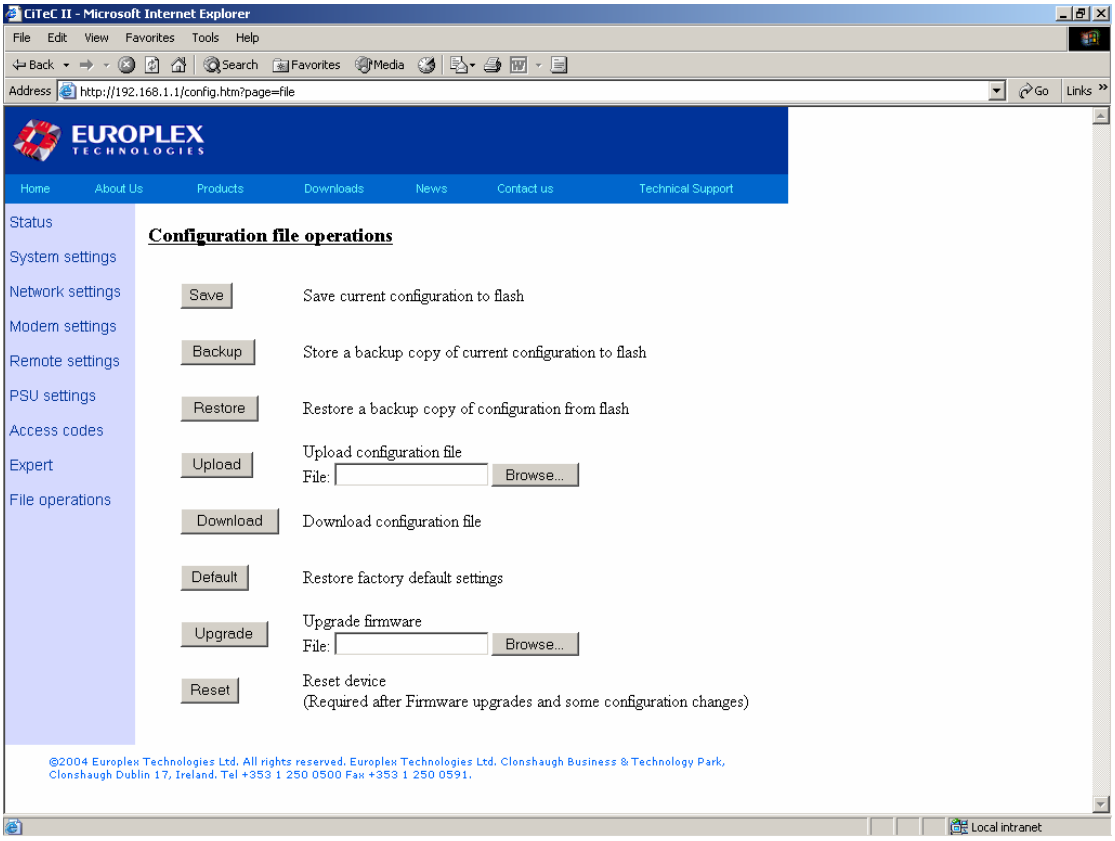

Figure 16: Configuration File Operations Screen

This screen should be accessed when all configuration options have been modified and updated. There are many settings available within this screen:

3.13.1 Save

This option saves the current configuration file settings to On-board Flash memory within CiTeC II. When all configuration options have been modified and updated, this option should be chosen to save all configuration settings to flash. The unit may then require a reset depending on which configuration settings have been changed.

NOTE If the Save option is not chosen before the unit is reset, changes made to configuration will become lost.

3.13.2 Backup

This option saves a backup copy of the current configuration file settings to On-board Flash memory within CiTeC II. A message File Backup Succeeded will be generated on the next page after a successful backup. Backing up the configuration file allows the configuring user to change current settings safely. If any problems are encountered with the new settings, the old configuration can easily be restored using the Restore setting.

3.13.3 Restore

This option restores a saved (backup) configuration file (see section 3.13.1). A message File Restore Succeeded will be generated on the next page after a successful restore. After restoring a saved backup,

the Save option should again be chosen. The unit may then require a reset depending on which configuration settings have been changed.


NOTE

If the Save option is not chosen before the unit is reset, backup changes will not have been applied.

3.13.4 Upload

Upload a configuration file to CiTeC II. Use this button to upload previously downloaded configuration settings to the CiTeC II unit. Select **Browse** to navigate to the file to be uploaded and then press **Upload**. See also the Download setting (section 3.13.5).

3.13.5 Download

Download all configuration settings from CiTeC II. Use this button to download all programmed configuration settings from the CiTeC II unit. The downloaded configuration values will be displayed in the next screen as an XML file. Choose **File->Save Page As**, give the file a name and save it to a chosen location. This file can then be uploaded to a CiTeC II unit at a later date. See also the Upload setting (section 3.13.4).


NOTE

Due to a problem with Microsoft Internet explorer, XML file formatting is modified by the Internet explorer browser. For this reason, this feature cannot be performed using Microsoft Internet Explorer. Europlex recommends the use of Mozilla Firefox Browser to avail of this feature. This browser is available from http://www.mozilla.org/products/firefox/.

3.13.6 Default

Restores CiTeC II configuration settings to factory default settings. A Factory Default Settings Restored message will be displayed on the next page after a successful factory default. In order to save these settings, the Save option (see section 3.13.1) must be chosen, then the unit must be reset. See the Reset setting (section 3.13.8) for details.

Note that if the Backup option (see section 3.13.2) has been chosen, this backup configuration file will still be stored after returning the unit to factory default settings. System log information will also be retained.

3.13.7 Upgrade

Upgrade CiTeC II firmware. CiTeC II firmware may need to be upgraded from time to time when new features are added or bugs are reported. Click **Browse** to select the new firmware file, and then click **Upgrade** to perform the file upgrade. A message will be generated on the next screen to show that the upgrade has been successful. If the upgrade has failed, a message will be generated to that effect. Once upgrade has been performed, the CiTeC II unit must be reset for changes to take effect. See also the Reset setting (section 3.13.8).

3.13.8 Reset

Reset CiTeC II device. CiTeC II must be reset after a firmware upgrade has been performed, after the unit has been factory defaulted, or after certain Network settings have been modified. These Network Settings include CiTeC IP Address, Listening IP Port, CiTeC IP Netmask and Gateway IP Address.

3.14 Data types and limits

The following table details all configuration tags within CiTeC II, and gives factory default settings.

Tag	Data type	Limit	Factory default
DEVICE-ID	Number	0 to 999,999	999,998
DEVICE-NAME	String	0 to 63 chars	CiTeC
HTTP-ENABLE	Number	0 or 1	1
HTTP-PORT	Number	1 to 65,535	80
TELNET-ENABLE	Number	0 or 1	1
TELNET-PORT	Number	1 to 65,535	23
TRACE-ENABLE	Number	0 or 1	0
TRACE-MODEM	Number	0 to 2	0
TRACE-ESCO	Number	0 to 2	0
TRACE-EDP	Number	0 to 2	0
TRACE-LOG	Number	0 to 2	0
NET-IP	IP address	x.x.x.x	192.168.1.1
NET-PORT	Number	1 to 65,535	50000
NET-NETMASK	IP address	x.x.x.x	255.255.255.0
NET-GATEWAY	IP address	x.x.x.x	0.0.0.0
NET-REPORT-ENABLE	Number	0 or 1	0
NET-REMOTE	Number	1 to 4	1
NET-TIMEOUT	Number	1 to 199	3
NET-RETRY-COUNT	Number	1 to 199	10
NET-POLL-ENABLE	Number	0 or 1	0
NET-POLL-INTERVAL	Number	1 to 86,400	10
NET-POLL-TRIGGER	Number	1 to 199	3
MODEM-DIAL-WAIT	Number	1 to 86,400	45
MODEM-DIAL-ATTEMPTS	Number	1 to 50	5
MODEM-DIAL-FAIL-WAIT	Number	1 to 86,400	6000
MODEM-DIAL-PULSE	Number	0 or 1	0
MODEM-REPORT-ENABLE	Number	0 or 1	0
MODEM-REPORT-NET-EVENTS	Number	0 or 1	0
MODEM-REMOTE	Number	1 to 4	1
MODEM-TEST-ENABLE	Number	0 or 1	0
MODEM-TEST-NET-UP	Number	0 to 86,400	0
MODEM-TEST-NET-DOWN	Number	0 to 86,400	0
MODEM-PIN	Number	xxxx	
MODEM-SMS-FILTER	String	0 to 1200 Chars	
SIA-OUTPUT-MODE	Number	0 to 1	0

Tag	Data type	Limit	Factory default
SIA-OUTPUT-FILTER	Bitwise variable	0's and 1's	
PSU-BATTEST-SET	Number	0 to 1	0
PSU-BATTEST-UNSET	Number	0 to 1	1
PSU-BATTEST-INTERVAL	Number	0 to 999,999	0
REMOTE1-ID	Number	0 to 999,999	1
REMOTE1-NAME	String	0 to 64 chars	Central Station
REMOTE1-IP	IP address	x.x.x.x	0.0.0.0
REMOTE1-PORT	Number	0 to 65,535	50001
REMOTE1-ENCRYPTION	Number	0 to 1	0
REMOTE1-KEY	Hex String	32 hex chars	0123456789ABCDEF0123456789ABCDEF
REMOTE1-MASTER KEY	Hex String	32 hex chars	0123456789ABCDEF0123456789ABCDEF
REMOTE1-MODEM NUMBER 1	String	0 to 30 chars	
REMOTE1-MODEM NUMBER 2	String	0 to 30 chars	
REMOTE2-ID	Number	0 to 999,999	999999
REMOTE2-NAME	String	0 to 64 chars	CiTeC Config Tool
REMOTE2-IP	IP address	x.x.x.x	0.0.0.0
REMOTE2-PORT	Number	0 to 65,535	50001
REMOTE2-ENCRYPTION	Number	0 to 1	0
REMOTE2-KEY	Hex String	32 hex chars	0123456789ABCDEF0123456789ABCDEF
REMOTE2-MASTER KEY	Hex String	32 hex chars	0123456789ABCDEF0123456789ABCDEF
REMOTE2-MODEM NUMBER 1	String	0 to 30 chars	
REMOTE2-MODEM NUMBER 2	String	0 to 30 chars	
REMOTE3/4-ID	Number	0 to 999,999	0
REMOTE3/4-NAME	String	0 to 64 chars	
REMOTE3/4-IP	IP address	x.x.x.x	0.0.0.0
REMOTE3/4-PORT	Number	0 to 65,535	50001
REMOTE3/4-ENCRYPTION	Number	0 to 1	0
REMOTE3/4-KEY	Hex String	32 hex chars	0123456789ABCDEF0123456789ABCDEF
REMOTE3/4-MASTER KEY	Hex String	32 hex chars	0123456789ABCDEF0123456789ABCDEF
REMOTE3/4-MODEM NUMBER 1	String	0 to 30 chars	
REMOTE3/4-MODEM NUMBER 2	String	0 to 30 chars	
USER1 Id	String	0 to 30 Chars	Master
USER1 Password	String	0 to 30 Chars	111111
USER2-4 Id	String	0 to 30 Chars	
USER2-4 Password	String	0 to 30 Chars	

4 Configuring CiTeC II for use with eCOM Client

This section of the manual deals with configuring CiTeC II for use with the eCOM PRO Event Handler Client. It will detail how to configure a CiTeC II device (with a unique ID, IP address, Server IP address, and so on) and how to set up a site within the eCOM PRO Event Handler Client to work with this CiTeC II device.

What this section of the manual will attempt to do is to demystify the configuration of this device by setting only 7 or 8 critical configuration settings at both the CiTeC II unit and the eCOM PRO Event Handler Client. This will allow a basic site to be set up to send and receive IP polls and send Alarm events to the eCOM Client via IP or Modem channel (in case of IP failure).

It assumes the following:

- That a PC is available with eCOMengine and eCOM PRO Event Handler Client software fully installed and operational
- That this PC has a network card installed with the IP address 192.168.10.101 added. See Section 3.1 for details on how to configure this IP address.
- That the user has access to a factory defaulted CiTeC II unit as well as a Europlex 3GS Controller system
- That all the necessary connections have been made as detailed in Section 1 of this manual, and
- That a common LAN connection and telephone lines are available to both eCOMengine Server and CiTeC II

4.1.1 CiTeC II Configuration

The configuration documentation for CiTeC II in Section 1 of this manual details 47 different configuration options. Whilst every configuration setting has a use, some are obviously more important than others, for example IP addresses, telephone numbers and unique IDs. On the other hand some settings are not so critical and may be best left at default values, for example PSU battery testing intervals and modem dialling attempts. The critical settings on CiTeC II that we will deal with for now are as follows:

Device I.D.	(1021)
CiTeC IP Address	(192.168.10.21)
IP Reporting enabled	(Yes)
IP Polling enabled	(Yes)
Modem Reporting enabled	(Yes)
Remote IP Address	(192.168.10.101)
Modem Phone No. 1	(XXXXXXX – Telephone number of modem at Server)

The values in parenthesis are the configuration values that we are going to set for this example.

- Connect to CiTeC II with Web Browser as detailed in Section 3.3. Once connected, click **Configuration** to go to the main configuration screen – the System Settings screen.

- On the System Settings screen:

  Set the Device I.D. to **1021**.

  Click **Update** to update this setting to CiTeC II memory.

- Click **Network Settings** to go to the Network Settings Screen.

  Set CiTeC IP address to **192.168.10.21**.

  Set IP Reporting enabled and IP Polling enabled to **Yes**.

  Click **Update** to update this setting to CiTeC II memory.

- Click **Modem Settings** to go to the Modem Settings Screen.

  Set Reporting enabled to **Yes**.

  Click **Update** to update this setting to CiTeC II memory.

- Click **Remote Settings** to go to the Remote Settings Screen.

  Under Remote 1 Settings, set Remote IP address to **192.168.10.101**.

  Set Modem Phone No. 1 to **XXXXXXX** (the number of the modem at your eCOMengine Server}.

  Click **Update** to update this setting to CiTeC II memory.

- Click **File Operations** to go to the Configuration file operations screen.

  Click **Save**. A File Save Succeeded message will display on screen.

  Click **File Operations** again, and then click **Reset** (this is required because IP settings were modified). CiTeC II is now configured.

4.1.2 eCOM PRO Event Handler Client Configuration

The critical settings on eCOM PRO Event Handler Client that we will deal with for now are as follows:

Unique Site I.D.	(1021) Note: this matches CiTeC II Device I.D.
IP Enabled	(Yes)
IP Address	(192.168.10.21) Note: IP address of CiTeC Device
IP Polling Enabled	(Yes)
Modem Enabled	(Yes)
Modem Phone Number	(YYYYYYY – Telephone number of modem at CiTeC II)

The values in parenthesis are the configuration values that we are going to set for this example.

- Open the eCOM PRO Event Handler Client and select **File->New Site** to display the Add New Site screen as follows:

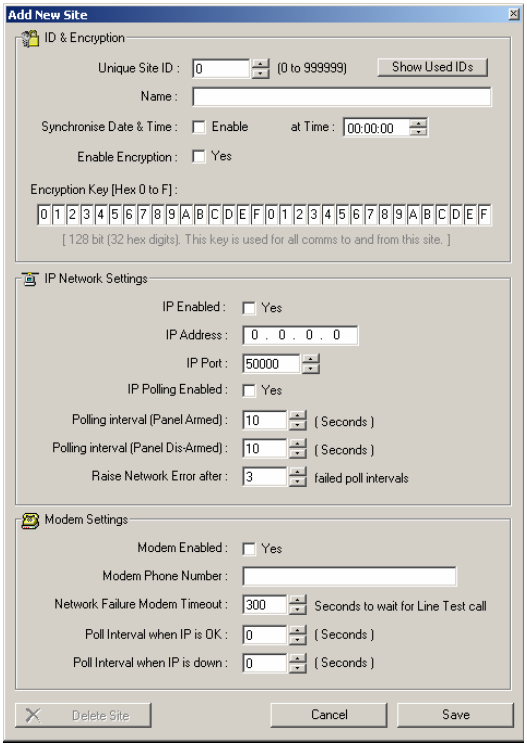

Figure 17: Add New Site

- Set Unique Site ID to **1021**.
- Under IP Network Settings:

  Set IP Enabled to **Yes** by selecting the checkbox.

  Set IP Address to **192.168.10.21**.

  Set IP Polling Enabled to **Yes** by selecting the checkbox.

- Under Modem Settings:

  Set Modem Enabled to **Yes** by selecting the checkbox.

  Set Modem Phone Number to **YYYYYYY** (the number of modem at your CiTeC II device).

  Click **Save** to save site setup.

- The following message will be displayed: Panel array must be refreshed to include this site – Refresh Now? Click **Yes**.

- CiTeC II buzzer will beep twice to show that IP polling is active, LED 2 will now be lit, and the site will appear in the eCOM Client Panel Grid (as illustrated in the following figure).

- You will now be able to take control of the Panel through the Panel Control window, receive alarm events from the panel and receive Modem calls in case of IP fail.

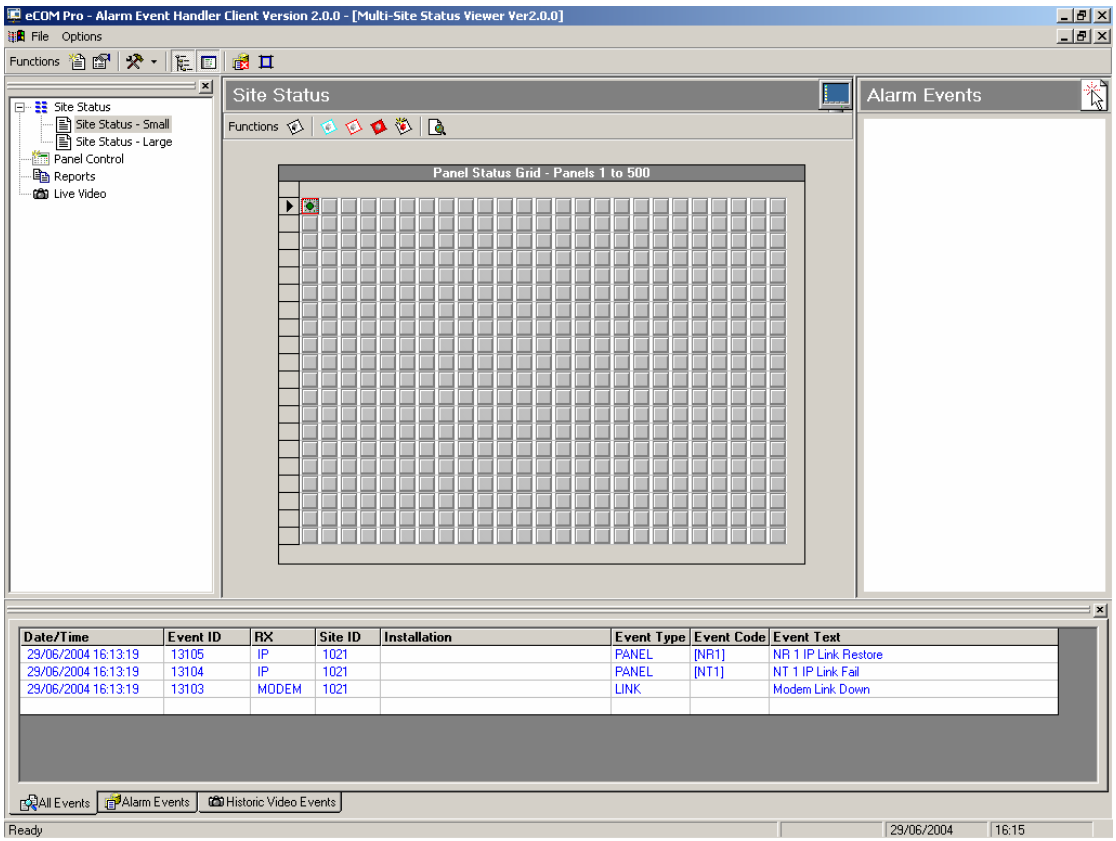

Figure 18: eCOM Client Panel Grid

4.1.3 IP fail - Activating Modem Channel

To generate an IP fail, disconnect the Network Link from the CiTeC II device. The default timer within CiTeC II for polling interval is 10 seconds, and the Polling fail trigger is set to 5 by default, so it will take approximately 50 seconds for the unit to report a Network Fail and activate its modem channel. The modem should then dial in and register a line test in the eCOM Client within about 20 seconds.

The Polling intervals at the eCOM Client (panel set and unset) are also set to 10 seconds and the Raise Network Error After trigger is set to 3, so an IP fail will be generated by the Client software after 30 seconds. This IP link fail is generated by the eCOMengine as the CiTeC II cannot now report IP events due to its Network connection being lost. When CiTeC II dials in, it will report IP Link Fail via modem.

You can also generate a line test from CiTeC II by right-clicking on the panel in the eCOM Client Panel grid and selecting **Queue PSTN Test Call**. This will initiate a test dial in from CiTeC II even when IP is up. If the IP link is down, the eCOMengine Server will dial into CiTeC II and then disconnect, then expect CiTeC II to call back.

5 Configuring CiTeC II using CiTeC Test tool

CiTeC II can also be configured using the CiTeC Test tool, CiTeCTest.exe. This tool is installed in the C:\CiTeC folder on the Server PC. Please note that this tool was originally developed as an Engineering tool for CiTeC I, and that some features may not operate correctly with CiTeC II.

5.1 CiTeC Test Tool

The main advantage to using this tool is that it allows an engineer to configure CiTeC II via a PSTN connection, as well as a Network connection. This means that a CiTeC II unit may be installed in a remote location and left in a factory defaulted condition. Once power and a PSTN line have been connected to the unit, an engineer may then dial in and configure the unit remotely.

Opening the CiTec test tool displays the CiTeC Test main screen (see *Figure 20*).

Navigation of menus is controlled by selecting appropriate tabs (Status, Control, Log Tails, Configuration, Files, and Video) and appropriate buttons on the toolbar.

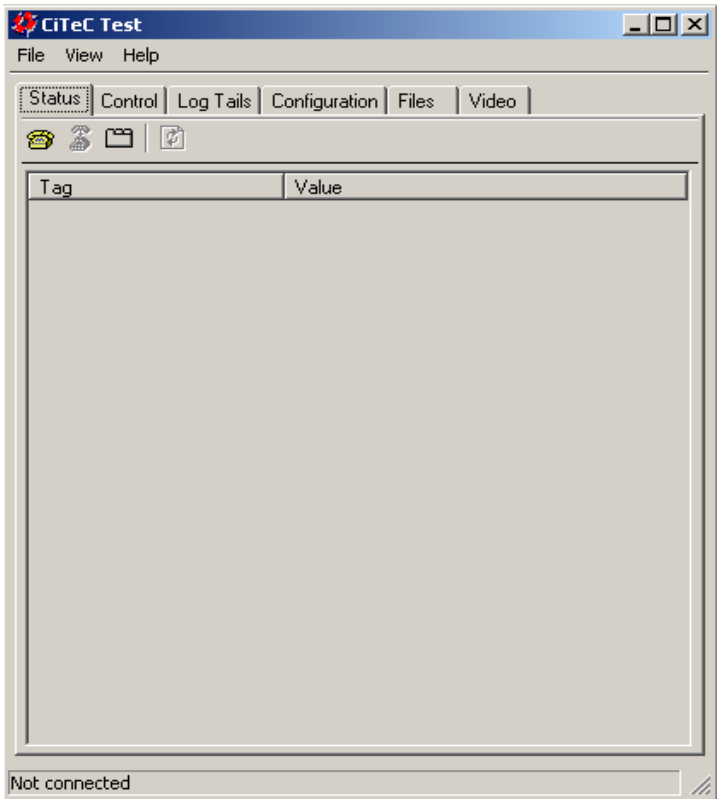

Figure 19: CiTeC Test Tool Main Screen

5.2 CiTeC Test Tool Connection Settings

In order to connect to CiTeC II, the connection settings must first be modified. Select the **Connect Settings** button on the toolbar of the CiTeC Test main screen . Doing this displays the Connection settings screen.

All values shown on this screen are factory default values, so when connecting to a factory defaulted CiTeC II, no changes to these values are necessary. However, if changes have been made to the connection settings previously, these settings will have been saved so the settings as listed above will need to be re-entered. These settings are described below.

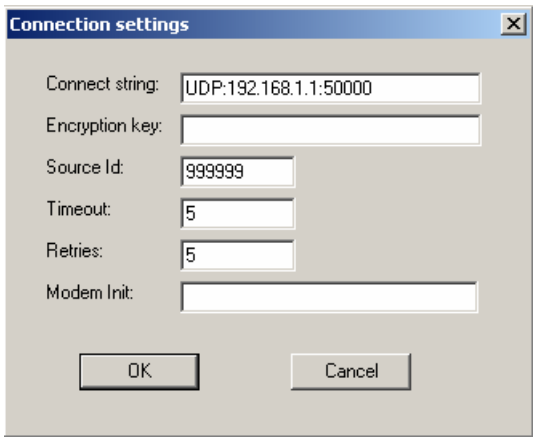

Figure 20: Connection Settings Screen

5.2.1 Connect String

This string serves two purposes: to allow a connection to be made to CiTeC II via a Network connection, or to allow a connection to be made via a PSTN modem.

To connect via a Network connection, the string is entered as shown (**UDP:192.168.1.1:5000**0). This tells the tool to make a UDP connection to IP address 192.168.1.1 (default IP address of CiTeC II) and on port 50000 (default Listening IP Port on CiTeC II).

To connect via PSTN modem, this string should be cleared out and the following string entered: **COMX:1234567** – where X is the Com Port number that the PSTN modem is installed on, and 1234567 is the telephone number at the CiTeC II device.

5.2.2 Encryption Key

Encryption Key assigned to Remote 2 (CiTeC Config Tool) – see section 3.9 Remote Settings. If Remote 2 on CiTeC II has been configured with an Encryption Key and Encryption has been enabled for this Remote, this Key must be entered here.

The default Encryption Key configured for Remote 2 in CiTeC II configuration is 0123456789ABCDEF0123456789ABCDEF, but by default Encryption has not been enabled for this Remote so this key does not need to be entered when connecting to a factory defaulted CiTeC II unit.

5.2.3 Source ID

This Source ID must match the Unique ID configured for Remote 2 in CiTeC II configuration – see section 3.9 Remote Settings. By default, this Unique ID is set to **999999** for Remote 2 in CiTeC II configuration, so this may be left as set above when connecting to a factory defaulted CiTeC II unit.

5.2.4 Timeout

Timeout in seconds. If CiTeC Test tool fails to receive a response from CiTeC II unit within 5 seconds, it will timeout and attempt to retry connecting based on the Retries setting.

5.2.5 Retries

Number of times CiTeC Test tool will retry connection if no response is received from the CiTeC II unit.

5.2.6 Modem Init

If any initialisation commands need to be sent to modem in order to initiate dial out, they may be entered here. Enter standard Hayes AT commands into this string if necessary. If a standard V.90 56Kbps modem is used, no further initialisation strings should be necessary.

Click **OK** when all settings have been entered.


NOTE

Any modems used by eCOMengine cannot be used to dial out to CiTeC II using CiTeC Test tool. A separate modem must be used for this purpose.

5.3 Connecting to CiTeC II

Select the **Connect** button  on the toolbar of the CiTeC Test main screen to connect to CiTeC II. It may take up to 30 seconds for a PSTN connection to be established. Once connected, the Status screen will be displayed (see *Figure 21*.).

5.3.1 Status Screen

The status screen gives CiTeC II status information – for example, Firmware versions, Panel type, Modem information, and so on.

Press the **Refresh** button  at any stage to refresh Status information.

Press the **Disconnect** button  at any time to disconnect from CiTeC II.

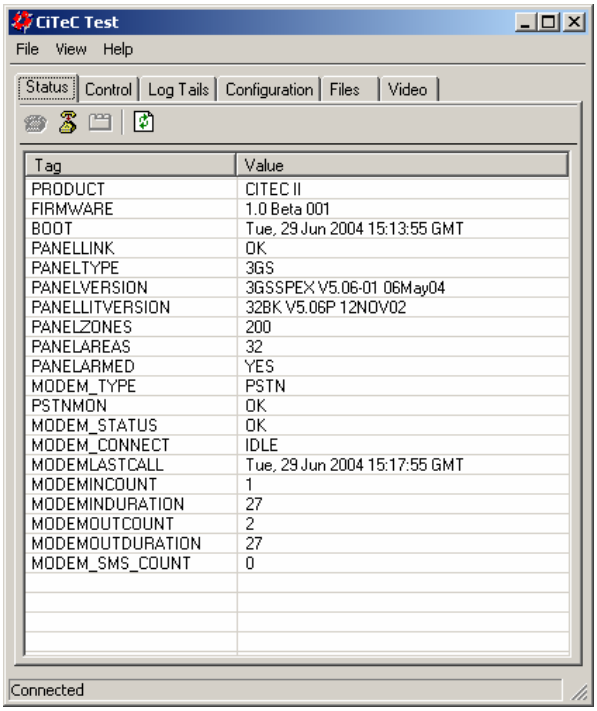

Figure 21: CiTeC Test Tool Status Screen

5.4 Configuring CiTeC II using CiTeC Test Tool

Select the **Configuration** tab on the CiTeC Test main screen. Select the **Read Configuration** button  on the toolbar to read the current configuration – see *Figure 22*.

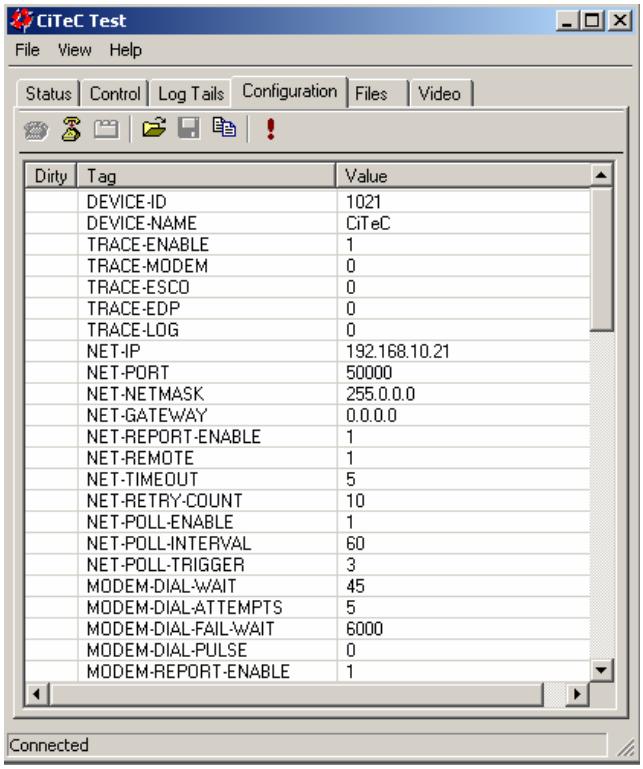

Figure 22: CiTeC Test Tool Configuration Screen

5.4.1 Changing Configuration Settings

To change a configuration setting, double click the setting to be changed. On the **Edit Configuration** dialog that displays, change the value in the Value field to the required setting. Select **OK** to make the change or **Cancel** to cancel the change.

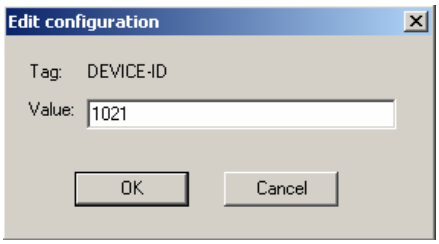

Figure 23: Edit Configuration Dialog

5.4.2 Saving Configuration settings

When all settings have been configured, they must be saved by pressing the **Save** button  on the toolbar.

As with the Web Browser Configuration utility, if any IP settings are changed, CiTeC II must be reset before these settings will take effect.

To Reset CiTeC II, press the **Reset** button on the toolbar. A **Reset OK** message will be displayed. CiTeC II will take approximately 15 seconds to fully reboot.

5.5 Updating Firmware using CiTeC Test Tool

Select the **Files** tab on the CiTeC Test main screen.

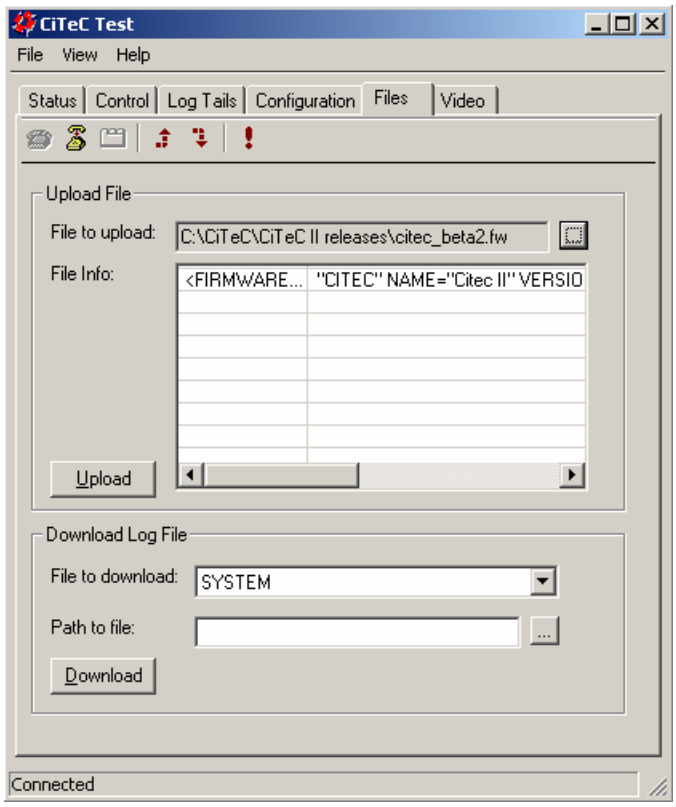

Figure 24: Firmware File Update Screen

To select a new file to upload to CiTeC II, select the **Browse** button ... to browse to the location of the new file – see *Figure 24*.

Select **Upload** to upload the new file.

For changes to take effect, CiTeC II must be reset. To do this, select the **Reset** button on the toolbar. A **Reset OK** message will be displayed. CiTeC II will take approximately 15 seconds to fully reboot.

NOTE This feature is currently only supported on CiTeC, and is not available on CiTeC II. Please upgrade firmware as detailed in Section 3.13.7.

6 Tracing

Tracing can be enabled on CiTeC II, allowing the configuring Engineer to troubleshoot CiTeC II. When tracing is enabled, debug information is sent out on the Console Serial Port on CiTeC II. It is possible to view trace information on the Modem, ESCO, EDP and LOG. Different levels of tracing can be set for all of these fields.

6.1 Tracing

In order to view tracing information, a connection must be made with the Serial port from a PC running a Com application such as HyperTerminal. Connect to the CiTeC II Console Serial port with a **straight-through** (9 way male to 9 way female) Serial Cable at 115200 baud, No Parity, 8 data bits, 1 stop bit and with no Flow Control.

6.1.1 Enabling Tracing

Tracing can only be enabled in Expert Mode (see section 3.12). To enable tracing, set TRACE-ENABLE to **1**. Disable tracing by setting TRACE-ENABLE to **0**.


NOTE

Due to the extra Network bandwidth required when tracing, it must be disabled after use! If tracing is left on, some features on CiTeC II may not operate correctly.

6.1.2 Trace settings

To set Tracing for Modem, Set TRACE-MODEM to **1** or **2**. Similarly, to set Tracing for ESCO, EDP and LOG information, Set TRACE-ESCO, TRACE-EDP and TRACE-LOG to **1** or **2**.

- Setting tracing to 1 for all of the above gives basic trace information.
- Setting tracing to 2 gives greater detailed tracing.
- Setting tracing to 0 disables tracing.

6.1.3 Determining IP address and Subnet Settings

Once a connection has been established with CiTeC II via the Console Serial Port, information on the IP address and IP Subnet of the unit can be determined by resetting the unit. When the unit reboots, this information is sent out on the Serial Port.

7 Troubleshooting

Problem	Suggested Solution
Can't connect to CiTeC II using Web Browser Configuration utility.	Default CiTeC II IP address is 192.168.1.1. Ensure that configuring PC is on the same network as CiTeC II unit. See section 3.1 for details.
	Check Ethernet status LED's on CiTeC II. LINK LED should be lit if a network connection is present.
	If configuring PC and CiTeC II are on same network try to ping the CiTeC II device – open the command prompt and type **ping 192.168.1.1**. CiTeC II should reply to this ping request. If IP address has been changed, try to ping this new address.
	Depending on how your network is configured, access may not be possible through a proxy server. An exception may need to be set up not to use a proxy server for addresses beginning with 192.*. This can be set up in LAN settings in Internet Explorer. Contact your system administrator for further details.
Can't login to CiTeC II Device after connecting with web browser.	Has User Name or Password been altered? Default User login is **Master**. This User login is case sensitive. Default password is **111111**. If an incorrect login name or password is entered, the login screen will be shown again.
	If all users have been disabled, logging into CiTeC II via a Web Browser interface will not be possible. If this is the case, login may still be possible using the CiTeC Test Tool. See section 0 for details.
Forgotten Login details	In this case, login may still be possible using the CiTeC Test Tool. See section 0 for details.
	Factory default CiTeC II unit. See section 2.2.1 for details.
IP address of CiTeC II unit is unknown.	For details on how to determine IP address of unit, see section 1, Tracing.

8 Technical Specification

8.1 3 Amp Power Supply Unit

PCB dimensions:	247mm x 150mm x 23mm
Power consumption:	90mA (no load)
Input voltage to 3A:	230V nominal AC rms.
Input voltage range:	+10%/-15%
Input voltage frequency:	47 – 63 Hz
Line regulation:	+/-1% @ 20°C
Load regulation:	+/-3% @ 20°C
Cross Regulation between outputs:	+/-3% @ 20°C
Temperature variation:	Voltage follows battery charging voltage
Ripple & Noise:	0.5V peak to peak
Nominal output voltage:	13.65V@20°C
Efficiency:	75%
Temperature range:	-10°C to +50°C
Humidity range:	0% to 90%, non-condensing

8.2 CiTeC II PCB

PCB dimensions:	188mm x 123mm x 19mm
Power consumption:	250mA Max.
Input voltage:	12 - 13.65V DC
Temperature range:	-10°C to +50°C
Humidity range:	0% to 90%, non-condensing

9 Table of Figures