





# ATS1745 IP-LAN Adapter Installation and Setup Guide

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# Important information

## Disclaimer

The customer is responsible for testing and determining the suitability of this product for specific applications. In no event is UTC Fire & Security responsible or liable for any damages incurred by the buyer or any third party arising from its use, or their inability to use the product.

Before making use of this product, make sure you have read and agreed to the license agreement in this manual. See “Software license agreements” on page 19.

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Installation in accordance with this manual, applicable codes, and the instructions of the authority having jurisdiction is mandatory.

While every precaution has been taken during the preparation of this manual to ensure the accuracy of its contents, UTCFS assumes no responsibility for errors or omissions.

## Advisory messages

Advisory messages alert you to conditions or practices that can cause unwanted results. The advisory messages used in this document are shown and described below.

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**WARNING:** Warning messages advise you of hazards that could result in injury or loss of life. They tell you which actions to take or to avoid in order to prevent the injury or loss of life.

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**Caution:** Caution messages advise you of possible equipment damage. They tell you which actions to take or to avoid in order to prevent the damage.

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**Note:** Note messages advise you of the possible loss of time or effort. They describe how to avoid the loss. Notes are also used to point out important information that you should read.



# Product overview

ATS1745 IP-LAN Adapter modules enable ATS data to be carried over an IP network and converted back to RS-485 communications for connection to bus devices.

This capability enables connection to bus devices such as a remote arming station (RAS) or a data gathering panel (DGP) via existing IP network infrastructure rather than by four-wire, twisted-pair, shielded data cable. In addition, ATS1745 modules provide securely-encrypted IP communications via a unique 128-bit encryption key.

ATS1745 modules are configured as either a start-of-line module (SLM) or an end-of-line module (ELM) and work as a pair for the IP communications link. An SLM can be connected to as many as 31 ELMs to provide IP connections to each bus's RASs and DGPs.

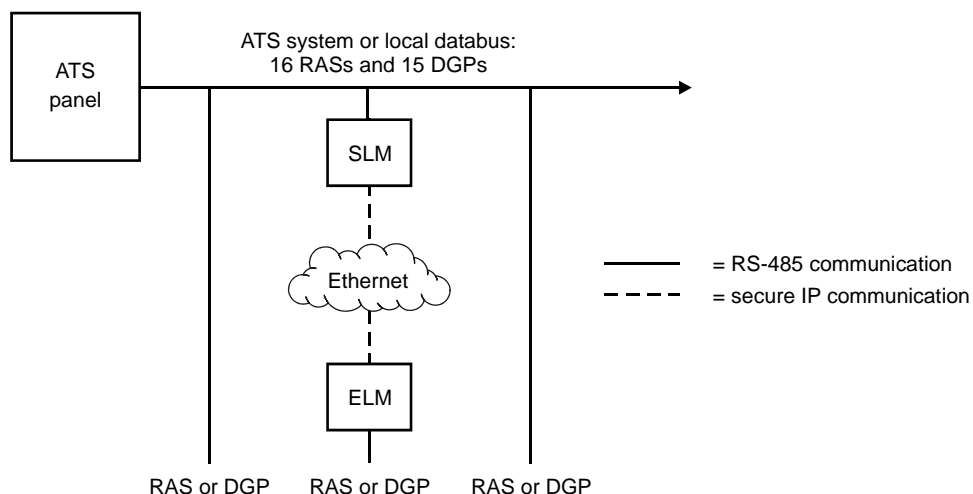
**Note:** An ATS panel can have 16 RASs and 15 DGPs on its bus. The maximum number of ELMs is 31.

ATS1745 modules have an onboard Web server that is used by installers to configure the module via a Web browser. For security purposes, a module's Web server can be disabled to prevent unauthorized access.

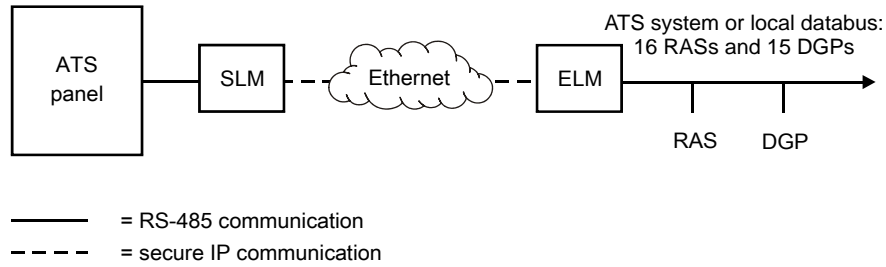
ATS1745 modules are not polled as bus devices: they are merely a portion of the system data bus. As a result, a variety of configuration options are possible, depending on what parts of the bus need to be carried on the IP network. Each ATS system databus will have at least two ATS1745 modules (one SLM and one ELM) and can have up to 32 modules (one SLM and 31 ELMs).

Figure 1 below and Figure 2 on page 2 depict a pair of ATS1745 modules used to communicate with bus devices over the IP network. Figure 3 on page 2 depicts one SLM and multiple ELMs.

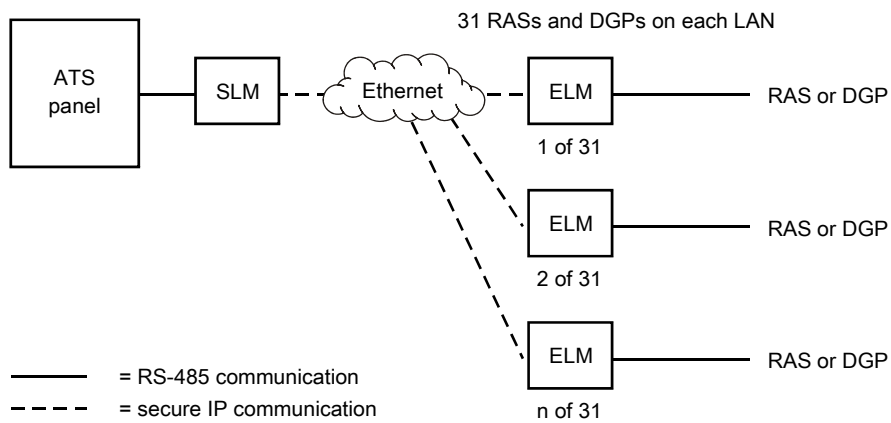
**Figure 1: One SLM and one ELM connecting a single bus device**



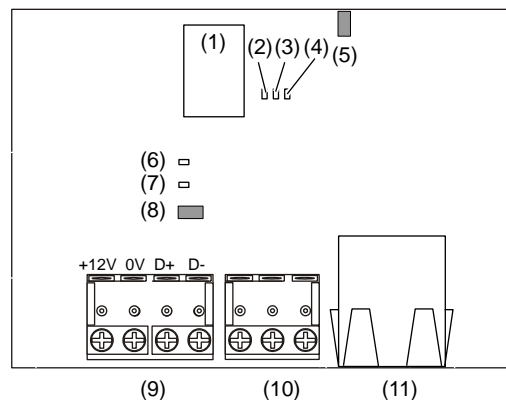
**Figure 2: One SLM and one ELM connecting a remote bus**



**Figure 3: One SLM used with multiple ELMs**



**Figure 4: ATS1745 IP-LAN Adapter general layout**



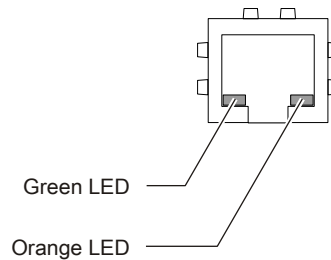
- |                               |                                   |
|-------------------------------|-----------------------------------|
| (1) DIP-switch, configuration | (7) LED, red: transmit data       |
| (2) Mode LED                  | (8) ATS bus termination           |
| (3) Fault LED                 | (9) RS-485 ATS bus                |
| (4) Encryption LED            | (10) RS-232 port: firmware update |
| (5) CFG-link                  | (11) RJ-45 Ethernet port          |
| (6) LED, yellow: receive data |                                   |



## LED indications

- Orange LED flickers during data transmission or reception.
- Green LED is on when the link is good.

**Figure 5: Side view of Ethernet port**



**Table 1: Mode, fault, encryption LED indications for an SLM**

LED	Activity	Indication
Mode LED	Single flash repeating (once per second)	SLM mode (SW1 ON)
Fault LED	Single flash repeating	The SLM cannot communicate with any one of its paired ELMs
Fault LED	Double flash repeating	The connection to one or more ELMs is too slow (a one-way latency of more than 20 ms). Refer to “Troubleshooting” on page 14.
Encryption LED	Flashing for 4 seconds, then repeating after two seconds	The module is in pairing mode (SW2 ON)
Encryption LED	Single flash repeating (twice per second)	Pairing to all ELMs is complete (SW2 ON)
Encryption LED	On constantly	Normal operation, pairing completed (SW2 OFF)

**Table 2: Mode, fault, encryption LED indications for an ELM**

LED	Activity	Indication
Mode LED	Single flash repeating (twice per second)	ELM mode (SW1 OFF)
Fault LED	Single flash repeating	The ELM cannot communicate with its paired SLM
Fault LED	Double flash repeating	The connection to the SLM is too slow (a one-way latency of more than 20 ms). Refer to “Troubleshooting” on page 14.
Encryption LED	Flashing for 4 seconds, then repeating after two seconds	The module is in pairing mode (SW2 ON)
Encryption LED	Single flash repeating (twice per second)	Pairing to the SLM is complete (SW2 ON)
Encryption LED	On constantly	Normal operation, pairing completed (SW2 OFF)

## DIP switch

The four-segment DIP switch (Figure 4 on page 2, item 1) controls the following settings:

- SW1 is OFF for an ELM or ON for an SLM
- SW2 is OFF for normal operating mode, or ON for pairing mode
- SW3 is OFF for Web programming mode, or ON for disable Web server
- SW4 is OFF for normal operating mode, or ON for firmware update mode

## Web interface

ATS1745 modules have an onboard Web interface that is used by installers to configure parameters such as assigned IP addresses.

For security purposes, an ATS1745 module's Web server can be disabled via SW3 to prevent unauthorized access.

See "Using the ATS1745 Web interface" on page 11 for details.

# Installation

We recommend that an ATS1745 module should be installed in an ATS panel or DGP enclosure fitted with a tamper switch in order to provide tamper protection.

**Note:** Before installing, ensure that the CFG pins (Figure 4 on page 2, item 3) are not linked. The CFG pins are linked only to reset an ATS1745 module to its default setting (see “Resetting the ATS1745 module” on page 17).

## Installation requirements

**Application.** The module may be used only on an ATS RS-485 databus.

**Network performance.** The network environment must be capable of transmitting data within specified limits. See “Checking network performance” on page 14 for details.

**Cabling.** The module must be installed in accordance to required cabling and regulatory requirements.

**Technician qualifications.** Only trained ATS technicians should plan the configuration and programming of ATS systems. Technicians must comply with and be trained in security and electrical industry installation regulations, as appropriate to this device.

**Note:** IP/Ethernet infrastructures do normally not provide features to warn the system regarding power failures or backup failures. This may result in device disconnections whenever the infrastructure is no longer able to propagate the data. To prevent this as much as possible, it is recommended to use Ethernet/IP devices along the data path that provide battery backup capabilities equal to the requirement for the security system.

## Installing ATS1745 modules

ATS1745 modules may be set up prior to installation if desired. See “System setup” on page 7.

### To install the ATS1745 module:

1. Determine whether the module is to be an ELM or an SLM (the default configuration is ELM).
2. If the module is to be an SLM, set SW1 to ON (Figure 4 on page 2, item 1).
3. Determine whether the module’s bus termination should be ON or OFF.

If the module is the last device on an RS-485 bus the bus termination should be ON. In a star wiring configuration, the RS-485 bus may consist of a number of cable runs (branches). Bus termination should be set to ON only at the devices at the far ends of the two longest branches. A star bus that has multiple branches in excess of 100 m may need to use ATS1744 ATS RS485 4-Way Databus Isolator modules to isolate the bus segments that do not have bus termination set to ON.

4. If required, set the module's bus termination to ON by placing the link (provided) over the TERM pins (Figure 4 on page 2, item 6).
5. Mount the module in a suitable enclosure using four screws. Make sure to use one of the cabinet's metal studs to assure a proper earth connection. If this is not possible then connect, using a wire, one of the PCB's mounting screws to the cabinet earth.
6. Terminate the required cables according to Figure 4 on page 2).
7. Connect the module to the customer's network.
8. Apply power to each ATS1745 module from their respective power supplies.

## Connecting the ATS1745 module

Refer to Figure 4 on page 2 for the locations of terminals.

### Bus / IP connections

Use four-wire, twisted-pair, shielded data cable (such as WCAT-52) for the RS-485 bus and IP connections. The control panel system and local data bus standard requirements remain applicable.

In each segment of the cable, connect one end only of the cable shield to an earth terminal (typically at the panel or DGP). A device (such as ATS1745 module) that does not have an earth point and is not at the end will have in and out segments. Join the cable shields for the in and out segments to make, in effect, one continuous shield that is connected at one end only to a bus earth terminal.

### Powering the module

The ATS1745 module consumes  $\pm 110$  mA at 13.8 V, and may be powered from the ATS panel or four-door controller bus at J11, or from an external power supply.

The ATS panel or four-door controller may be used to power the module in the following circumstances:

- The bus cabling distance to the module is no more than 50 m.
- Electrical isolation is not required.

If powering the module from the ATS panel or four-door controller is not practicable, then you must use an external power supply.

---

**Caution:** SLM has to be earthed to the same potential as its power supply.

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**Note:** If an external power supply is used, the DC output must be within the range of 12 to 14 VDC.

# System setup

ATS1745 modules may be preconfigured (network parameters assigned and modules paired) before they are installed onsite. Alternatively, modules may be installed onsite and then configured. See “Installing ATS1745 modules” on page 5.

An ATS IP bus system can have one SLM and up to 31 ELMs on each bus. Being connected via the IP network, ELMs may be located a considerable distance from the SLM and located in different buildings. Preconfiguring ATS1745 modules at one location may not be possible when the assigned IP addresses are in different subnets.

Following system setup and installation (regardless of the order), each ATS1745 module’s DIP switch must be in the correct position for normal operating mode. See “DIP switch” on page 4. For security purposes, a module’s Web server can be disabled to prevent unauthorized access.

## Requirements

Setting up ATS1745 modules (one SLM and one or more ELMs) requires that you know the following values for each module, as assigned by the network administrator:

- IP address
- Gateway address
- Net mask
- Port number

If needed, use “Network assignments worksheet” on page 23 to list the details for each module.

In order to preconfigure all modules at one location you will also need a computer on the same network as the ATS1745 modules (at their assigned IP addresses) and Ethernet and power cabling for at least two modules (the SLM and one ELM).

## Setup overview

A connected and powered ATS1745 module may be initially viewed via a Web browser at the default IP address (192.168.20.100 for an SLM or 192.168.20.105 for an ELM). Each module will need to be reprogrammed with network parameters assigned by the site’s network administrator. Any time an IP address is changed and saved, the Web browser will automatically redirect to the new address.

The SLM identifies each ELM by the ELM’s IP address when the ELM communicates with it, and adds it to the list of 31 possible ELMs. Once the SLM and an ELM have their assigned network parameters and connection is verified

(connection indicator is green), the modules must be paired to enable communications and to provide encryption.

## Programming assigned network parameters

First program the SLM with its assigned network parameters and then program each ELM with the assigned network parameters for both the SLM and the ELM.

### To program the SLM's assigned network parameters:

1. Select the ATS1745 module with SW1 in the ON position (Figure 4 on page 2, item 1).
2. Connect power and Ethernet cables to the module (Figure 4 on page 2).
3. Start Internet Explorer on a computer connected to the network, type "192.168.20.100" in the address bar, and then press Enter. You should see a screen similar to Figure 7 on page 11.
4. Log in to the SLM's Web interface. See "Logging in" on page 11.
5. Type the assigned network parameters in the SLM's Device Configuration window under the Target heading, and then click Save. After a few seconds, the Web browser will redirect to the login window at the new IP address.

If the module is not yet installed, we recommend that you attach a tag to the module to identify its role (SLM) and its IP address until the module is installed.

1. Select an ATS1745 module with SW1 in the OFF position (Figure 4 on page 2, item 1).
2. Connect power and Ethernet cables to the module (Figure 4 on page 2).
3. Start Internet Explorer on a computer connected to the network, type "192.168.20.105" in the address bar, and then press Enter. You should see a screen similar to Figure 7 on page 11.
4. Log in to the ELM's Web interface. See "Logging in" on page 11.
5. Type the SLM's assigned IP address in the ELM's Device Configuration window under the Remote heading, and then click Save IP.
6. Type the ELM's assigned network parameters in the ELM's Device Configuration window under the Target heading, and then click Save. After a few seconds, the Web browser will redirect to the login window at the new IP address.
7. Repeat steps 1 to 6 for each subsequent ELM. If necessary, disconnect Ethernet and power cabling from the previously programmed ELM to use on the subsequent ELM.

## Enabling communications

Once the SLM and an ELM have their assigned network parameters and connection is verified (connection indicator is green), the modules must be paired to enable communications and to provide encryption.

Pairing of an ELM to the SLM requires the installer to momentarily toggle a DIP switch on both the SLM (which may be at the ATS panel) and the ELM (which may be at a remote location).

#### To pair an ELM to the SLM:

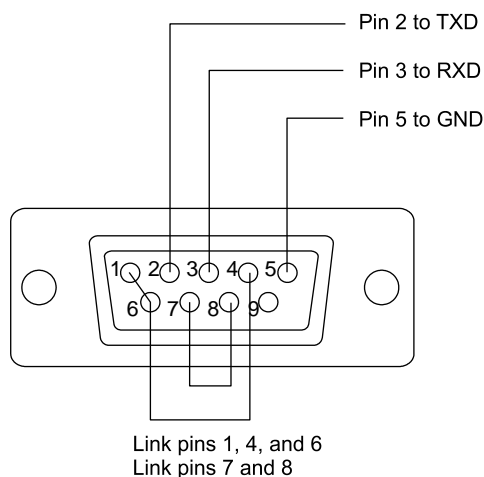
1. On the SLM move DIP switch SW2 to ON (Figure 4 on page 2). The SLM's encryption LED begins flashing.
2. On the ELM move SW2 to ON. The ELM's encryption LED begins flashing.
3. During the pairing process, the encryption LED blinks evenly for four seconds, pauses (goes off) for two seconds, and repeats this cycle. When the pairing process is complete, the encryption LED blinks every second.
4. After the encryption LED indicates that pairing is complete (typically three seconds) move the ELM's SW2 to OFF.
5. On the SLM move SW2 to OFF.
6. Log in to the SLM's Web interface. See "Logging in" on page 11.
7. In the SLM's Device Configuration window look at the ELM's IP address (Figure 8 on page 12). A green LED to the right of the address indicates encrypted communications.

## Updating firmware

An ATS1745 module's firmware may be updated from time to time. Refer to the version number displayed below the Logout button on the Web interface (Figure 8 on page 12) for the currently-loaded firmware version.

The ATS1745 module's RS-232 terminals can be used to upload a new firmware file from a computer via a HyperTerminal session. Figure 6 below indicates the required connections from the module to a DB9 connector, and the links required between pins on the DB9 connector.

**Figure 6: Wiring details for DB9 connector**



**Note:** During firmware update, the ATS IP bus system does not carry communications between the ATS panel and remote bus devices.

**To update ATS1745 firmware:**

1. View the module's Web interface (Figure 8 on page 12) and note the currently-loaded firmware version.
2. Remove power to the module.
3. Move SW4 (Figure 4 on page 2, item 1) to the ON position.
4. Connect power to the module.
5. Connect the module's RS-232 port (Figure 4, item 8) to the computer's COM port.
6. Start HyperTerminal and open a connection to the Comm port with 115200 bits per second, 8-N-1. HyperTerminal should say "waiting for upgrade .... " with a few CCCC on screen.
7. Select Send File from the Transfer menu. Select IK Xmodem as the Protocol and then browse to select the supplied firmware file.
8. Click Send. HyperTerminal opens a Send File window and indicates status. When finished, HyperTerminal closes the Send File window and indicates Upgrade Completed.
9. Remove power to the module.
10. Move SW4 (Figure 4 on page 2, item 1) to the OFF position.
11. Connect power to the module.
12. View the module's Web interface (Figure 8 on page 12) and note the currently-loaded firmware version. It should display the updated version number.

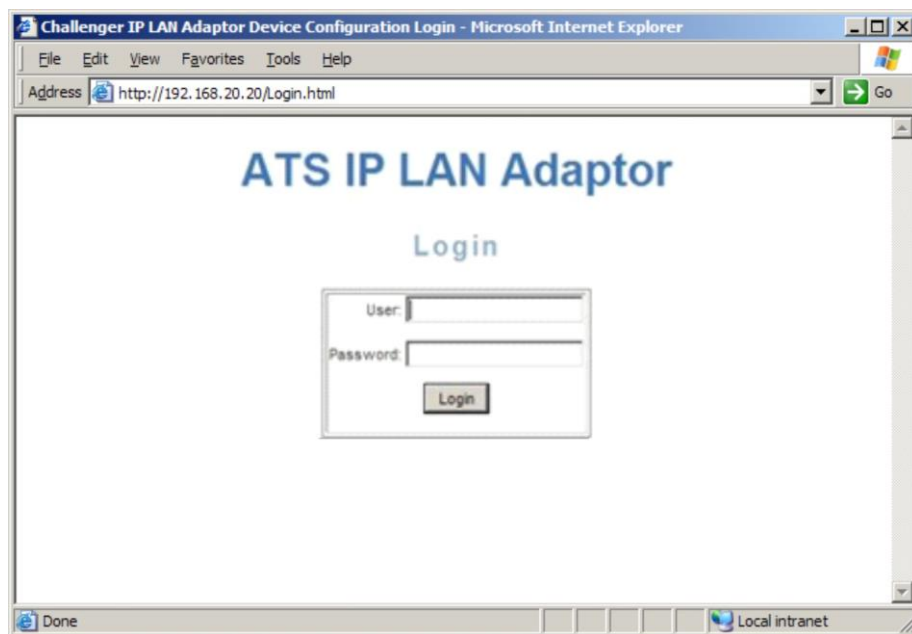


# Using the ATS1745 Web interface

When powered and connected to an IP network, an installer can access the login page of an unprogrammed ATS1745 module's Web interface at <http://192.168.20.100> for an SLM or <http://192.168.20.105> for an ELM.

Only one device at any time can be on the network at the default IP address. There should be only one SLM at <http://192.168.20.100> but there may be multiple ELMs at <http://192.168.20.105>. If so, any additional ELMs must either be unpowered or not connected to the network.

Figure 7: ATS1745 login window



## Logging in

Log in with the default user name "admin" and the default password "password".

**Note:** The default password must be changed to keep unauthorised persons from viewing or modifying your programming. See "Managing users" on page 13.

After logging in, you will see a Device Configuration window, which varies depending on the ATS1745 module's role (Figure 8 on page 12). The ATS1745 module's role is determined by the setting of SW1 (Figure 4 on page 2, item 1).

A logged in user is automatically logged out after 20 minutes of inactivity.

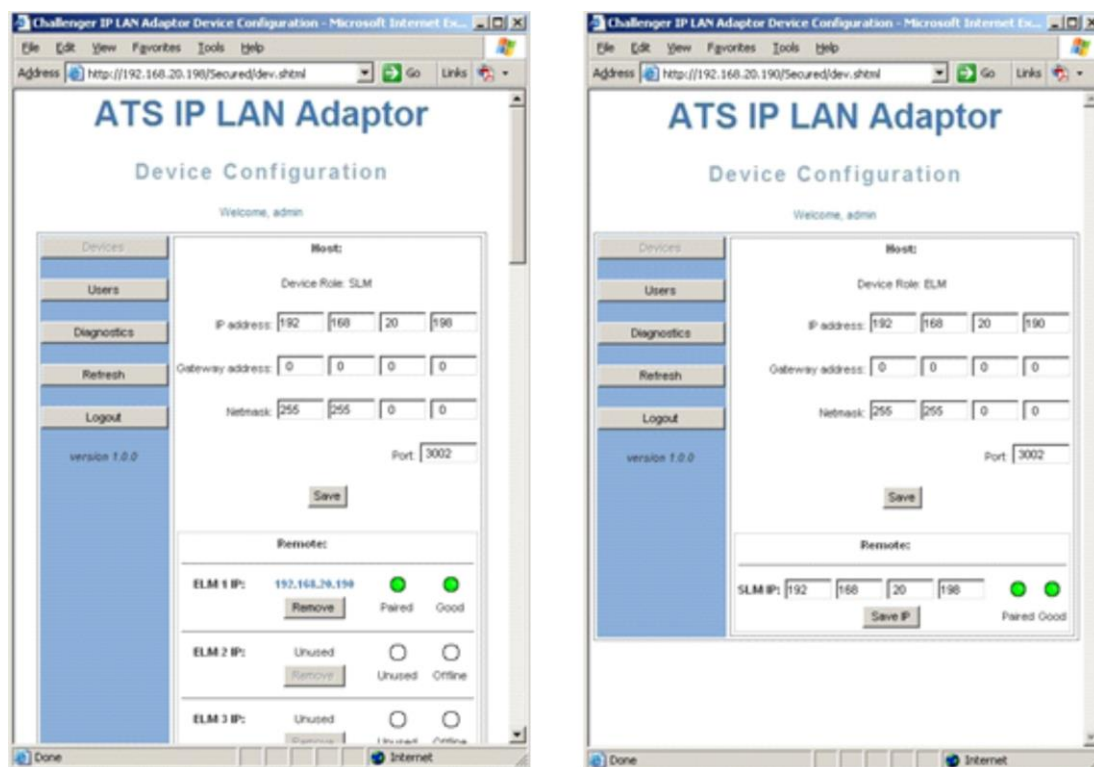
## Logging out

To end a session, click the Logout button.

**Note:** If a user's session is ended without logging out (for example, by closing the Web browser), only that user may log in again until the 20-minute timeout expires.

# Configuring devices

Figure 8: Device Configuration windows for SLM and ELM



The Device Configuration window varies depending on the ATS1745 module's role (Figure 8 above).

Use the SLM Device Configuration window to:

- Program the SLM's assigned network parameters under the Host heading.
- Display the IP address, pairing (encryption) status, and connection status of each ELM under the Remote heading.
- Remove an unneeded ELM's details to provide space for a new ELM (or the same ELM at a new IP address).

Use the ELM's Device Configuration window to:

- Program the ELM's assigned network parameters under the Host heading.
- Program the SLM's assigned network parameters under the Remote heading.
- Display the IP address, pairing (encryption) status, and connection status of the SLM.

The SLM Device Configuration window displays a pair of simulated LEDs for each ELM, and the ELM Device Configuration window displays a pair of simulated LEDs for the SLM. Refer to Table 3 on page 13 for details.

Hover the cursor over a configuration window control to see additional information.

**Table 3: Device configuration window LED indications**

LED Colour	Left-hand LED	Right-hand LED
White	Message is "Unused".  The corresponding module has not been paired, or there is no module detected at that position	Message is "Offline".  The ELM is not connected to the SLM.
Green	Message is "Paired".  The ELM has been paired to the SLM and no errors have been detected. This is the normal condition.	Message is "Good".  The ELM has a good connection to the SLM. This is the normal condition.
Red	Message is "Pair error".  The ELM has been paired to the SLM and errors have been detected. This IP Bus cannot carry ATS data until the fault is resolved and the LED is green.	Message is "Slow".  The ELM is connected to the SLM but a high latency condition is detected. This IP Bus cannot carry ATS data until the fault is resolved and the LED is green. Refer to "Troubleshooting" on page 14.

## Managing users

All ATS1745 modules are shipped with one default user named "admin" with password "password". User names and passwords are case sensitive and must be entered correctly.

**Note:** The default password for "admin" must be changed to keep unauthorised persons from viewing or modifying your programming.

An additional four user name and password combinations can be added. All users have the same permissions (the "admin" user does not have special privileges).

If an ATS1745 module is reset, the default user named "admin" with password "password" is restored and all other users are deleted. See "Resetting the ATS1745 module" on page 17.

## Performing diagnostics

The SLM measures the one-way Ethernet trip times in milliseconds (SLM to ELM) and displays the results for each ELM on the Diagnostics window. Click Refresh to update the window. The time must be less than 20 milliseconds.

# Troubleshooting

## High latency faults

The IP connection between an SLM and ELM must support fast (low latency) connection. Communications with an ATS panel are not possible over a slow (high latency) connection.

An excessively slow connection is indicated in the following manner:

- The corresponding right-hand LED indicator in the Device Configuration window (Figure 8 on page 12) is red, and the message is “Slow”.
- The ATS1745 module’s onboard fault LED indicates a repeating double flash (see Figure 4 on page 2, item 5).
- The one-way Ethernet trip time between and SLM and an ELM is 20 milliseconds or greater, as shown in the Diagnostics window.

## Avoiding high latency faults

Before you install an IP bus system, use the IP-LAN Adapter Network Tester to determine whether the network environment is compatible with using ATS1745 modules. Refer to “Checking network performance” below.

## Troubleshooting high latency faults

If a high latency condition exists before installation, or develops after installation, consider the following options:

- Ensure you are using a fast bus or WAN connection.
- Avoid the use of dial-up, microwave, or other network links that may increase latency.
- Avoid congested (high-traffic) routers or hubs.
- Reduce the number of routers or hubs between the SLM and ELM.
- Use the IP-LAN Adapter Network Tester to check the results of any changes. Refer to “Checking network performance” below.

## Checking network performance

The “IP-LAN Adapter Network Tester” application is available from UTC Fire & Security technical support teams.

Use the IP-LAN Adapter Network Tester to help you determine whether the network environment is compatible with using ATS1745 modules to carry ATS system data, where IP data is carried by more than router (or hub).

We recommend that you test the network prior to installing ATS1745 modules. However, even in a successfully tested and installed system, conditions may change and troubleshooting actions may be required.

The IP-LAN Adapter Network Tester measures the performance of your network, and estimates the number of poll errors that ATS1745 modules could experience if installed on the network. We recommend that you test the performance across each router that you plan to use to carry ATS system data for at least 24 hours to ensure that you have tested during peak network load.

### **Getting ready**

If you are using the IP-LAN Adapter Network Tester for troubleshooting an installed system, you already have access to the assigned IP addresses of the SLM and ELM.

If you are testing the network prior to installing an ATS IP bus system, then you need to know the IP addresses of affected routers (talk to the network administrator if needed). Determine where ELMs are required, and whether they will be connected to the network via a different router than the SLM is connected to. Test the network performance where the IP communications between the SLM and an ELM must cross more than one router.

**Tip:** If the SLM and ELM will be connected through the same router, then you don't need to use the IP-LAN Adapter Network Tester for those modules (there shouldn't be any latency and ATS1745 modules shouldn't experience any poll errors).

In the following steps, we'll assume you are testing the network prior to installing the ATS IP bus system and the testing computer is located on the SLM side of the network. If more convenient, you can test the network from the ELM side of the network because the direction doesn't matter.

### **To test the network:**

1. Install the IP-LAN Adapter Network Tester application on a computer that is connected to the same router as the SLM would be connected to.
2. Double-click "IP-LAN Adapter Network Tester.exe" to run the application.
3. Type the IP address of the ELM's router in the Target field.
4. If you are troubleshooting an installed system, type the ELM's IP address in the Target field.
5. Click Start and observe the poll errors and statistics data as the tool measures the network's responses to ping commands. See "Test results" below for details.

### **Test results**

The most important detail is "poll errors". This indicates how many times a device (or devices) connected through an ATS IP bus will experience poll errors. If you get zero poll errors, then the tested network should be suitable to use an ATS IP bus.

**Tip:** Ensure that the computer running the IP-LAN Adapter Network Tester is connected to the same router as one end of the ATS IP bus, and you are pinging the router at the other end of the ATS IP bus.

If you are receiving poll errors, then the network is probably too slow to use an ATS IP bus successfully. If you have experienced poll errors, click Details to display a minute-by-minute tally of poll errors. The tally may assist you to determine the cause of the fault (for example, if the only poll errors occurred when a network cable was unplugged). Four slow pings in a row constitute a poll error, and would generate a module offline alarm in ATS.

Pings below 20 ms indicates how many responses have been received within 20 milliseconds. Pings above 20 ms indicates how many responses have been received above 20 milliseconds.

Timeouts measure how many requests were sent without a reply. If you see multiple timeouts and no replies, it may mean that you have entered an invalid address in the Target field, the Target isn't sending ping replies, or a firewall on the network is blocking ping requests. Seek assistance from the network administrator, if needed.

## Problems viewing ATS1745 Web pages

In order to view an ATS1745 module's Web pages:

- You must use a compatible Web browser, such as Internet Explorer 6 (or later) or Mozilla Firefox.
- The module's SW2, SW3, and SW4 must be OFF (Figure 4 on page 2, item 1).
- You must use the IP address currently programmed for the module. The default IP address is 192.168.20.100 for an SLM or 192.168.20.105 for an ELM (determined by the setting of SW1), but this will be changed to an assigned IP address for an installed module.
- Your computer may need to be configured to connect to the module's assigned IP address. See "Setting up the installation computer" below.

### Setting up the installation computer

ATS1745 modules are programmed using Internet Explorer to display the Web pages generated by the module's embedded Web server at either the default IP address or the assigned IP address (provided by the local network administrator).

Depending on the particular network environment you may need to configure your computer's LAN settings.

**Note:** If required, seek advice from the client's IT staff before you start.

## Problems logging in

If you can see the login window for a particular IP address, but cannot log in with a known good user name and password, a different user may have been logged in less than 20 minutes previously and ended the session without logging out. If so, you will need to wait up to 20 minutes before you can log in. See "Logging out" on page 11.

If you cannot see the login window for a particular IP address, you may need to perform a “hard” refresh of the Web browser. This bypasses any cached versions of the window and displays the current window being served by the ATS1745 module.

To hard refresh the Web browser, simultaneously press the Ctrl and F5 keys.

If you still cannot see the login window, close and restart the Web browser. If unsuccessful, see “Problems viewing ATS1745 Web pages” on page 16.

## **Unexpected poll errors or device offline faults**

Unexpected poll errors can occur in Ethernet / IP networks where devices like routers or switches are temporarily offline for maintenance, or if part of the infrastructure is being worked at. This may cause communication faults to the devices connected at an ELM. Please inform the IT staff and ensure that proper notification is provided for this type of maintenance.

## **Resetting the ATS1745 module**

ATS1745 modules are shipped with the following default settings:

- IP address 192.168.20.100 for an SLM or 192.168.20.105 for an ELM (determined by the setting of SW1)
- Gateway 0.0.0.0
- Net mask 255.255.255.0
- Port 3002
- User name “admin” with password “password”

You may need to reset an ATS1745 module to its default settings for troubleshooting purposes or if you cannot log in to the Web interface due to an incorrect password. Resetting the module erases all programming (including the assigned IP address) and creates one user name “admin” and password “password”.

### **To reset the ATS1745 module:**

1. Place a link on the CFG pins (Figure 4 on page 2, item 6).
2. Remove power and then repower the module.
3. Remove the link on the CFG pins.

## Specifications

Operating power	13.8 VDC supplied by the panel
Operating current (typical)	110 mA
Operating temperature	0 to 40°C
Maximum relative humidity	93 %
Dimensions (PCB) (W x H x D)	50 x 80 x 20 mm
Weight (PCB)	31 g



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iconv (Charset Conversion Library) v2.0

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# Network assignments worksheet

Copy this form as needed to list the assigned network details for ATS1745 IP-LAN Adapter modules.

Role	IP Address	Gateway address	Netmask	Port number
SLM				
ELM1				
ELM2				
ELM3				
ELM4				
ELM5				
ELM6				
ELM7				
ELM8				
ELM9				
ELM10				
ELM11				
ELM12				
ELM13				
ELM14				
ELM15				
ELM16				
ELM17				
ELM18				
ELM19				
ELM20				
ELM21				
ELM22				
ELM23				
ELM24				
ELM25				
ELM26				
ELM27				
ELM28				
ELM29				
ELM30				
ELM31				

