ESM-24T02Mx EtherGuard Managed Switch by Alloy

Quick Installation Guide

V 1.0

Unpacking

Open the shipping carton of the Switch and carefully unpack its contents, the carton should contain the following items:

- One - 24 port Fast Ethernet Layer 2 Switch.
- Mounting Kit: 2 mounting brackets and screws
- Four rubber feet with adhesive backing.
- One AC power cord.
- One RS-232 cable
- CD with Documentation

Installation

Follow the guidelines below to install the Switch.

- Do not place any object weighted more than 3Kg on the Switch.
- Connect the power cord to the Switch and the power outlet.
- Leave at least 10 cm (4 inches) of space around the Switch for heat dissipation.

Desktop or Shelf Installation:

When installing the Switch on the desktop or shelf, please attach the rubber feet to the Switch. Peel off the protective paper on the pads and attach them on the bottom of the Switch (one at each corner).

Rack Installation:

The ESM-24T02Mx Switch is rack-mountable for installation in any EIA 19inch equipment rack. To do this, first install the mounting brackets on the Switch's side panels (one on each side), secure them with the included screws, and then use the screws provided with the equipment rack to mount the Switch in the rack.

Power On the Switch:

The ESM-24T02Mx Switch has a universal power supply (90 ~ 260V AC, 50 ~ 60Hz power source). The AC power cord connector is located at the rear of the unit and the On/Off switch is next to the connector. Connect the power cord from the power outlet to the Switch and push the On/Off Switch to "ON" position to power on the Switch. After the Switch is powered on, it will perform "self-diagnostic" (POSD). This process takes about 100 seconds to complete, during this process, the "DIAG" LED will blink green and the Switch will not respond to any configuration program and all the connections to the Switch will be unavailable. When the process is completed, the "DIAG" LED will stay solid green.
Below is a table that describes the meaning of each LED indicator.

LED indicators information

LED		Color	Status	
			Solid	**Blinking**
Power		Green	Power is applied to this device	N/A
DIAG		Green	Self diagnostic successful	Performing self diagnostic (after Power On)
Cooling Fans	**FAN1**	Red	Left cooling fan failed	N/A
	FAN2	Red	Right cooling fan failed	N/A
LINK/ACT (1 ~24 port)		Green	10Mbps Ethernet connection speed	TX/RX activity or Collision
100M (1 ~24 port)		Green	100Mbps Fast Ethernet connection speed	N/A
		Off	10Mbps connection speed	N/A
10/100/1000Mbps Copper Gigabit Port (Optional Module)				
Top LED		Orange	100Mbps Fast Ethernet connection speed (with Middle LED off)	N/A
Middle LED		Green	10Mbps Ethernet connection. (with Top LED off)	N/A
Bottom LED		Green	N/A	TX/RX activity or collision
Top+Middle LEDs		Orange + Green	1000Mbps Gigabit connection speed	N/A

Initial set up for management

There are two ways to perform the initial setup on the Switch; one is "Out-of-Band Configuration" (connect your PC's serial port to the Switch's console port with the included RS-232 serial cable and run a terminal communication program) and the other is "In-Band Configuration" (network a PC to the Switch and run a web browser session or telnet). The sections below show the instructions on how to perform both operations.

Out-of-Band Terminal Mode Configuration

If you are using Microsoft Windows, boot up the computer, go to "Start", "Programs", "Accessories", "Communications", and open "HyperTerminal". After that follow the instructions below to setup a new terminal connection for the Switch. If you are using other communication software applications, please select the correct COM port and setup the connection properties according to step 3 below.

1. Type in a name for the connection (e.g. SNMP Switch), select an icon for the connection, and click "OK".
2. Select the COM port that you are using for this connection and click "OK".

3. Setup the COM port properties by using the information below and click "OK".

    Bits Rate per Second = 57600
    Data Bits = 8
    Parity = None
    Stop Bit = 1
    Flow Control = None

4. Connect the included serial cable from the computer's COM port to the Switch's console port.
5. Power on the Switch and you will see some messages displayed in the "HypertTerminal" window. The Switch's Power On Self Diagnostic (POSD) takes about 100 seconds. After that, you will be presented with the login screen.
   If the Switch is already powered on and finished its self-diagnostic, after running the terminal communication program, please hit "Enter" once to get the login screen.
6. At "username" field type in **admin** and hit "Enter".
7. At "password" field type in **admin** and hit "Enter". You are now logged into the Switch's configuration program.
8. On the lower portion of the screen, you will see descriptions of the navigation keys (e.g. Tab, Space Bar, and Enter). Please use these keys to move around the configuration program.

For more information about the configuration settings, please refer to the User's Guide on the CD-ROM.

Note: If there is no activity for 2 minutes the console program will automatically logout. Please reenter the password and username to login.

In-Band Configuration via Ethernet Network

In addition to terminal mode configuration, the EMS-24T02Mx Switch also supports In-Band Configuration using a Web Browser. You can simply connect a network-ready PC to the Switch, open your web browser, go to the Switch's configuration page (Switch's IP address), and configure the Switch by clicking the appropriate menu items.

Before you can access the switch through in-band, you must make sure the computer connecting to the Switch has a web browser and the TCP/IP protocol (with valid IP address) is bound to the network adapter. After that, you can either change your computer's IP address to the same class as the Switch's IP address, or you can login to the Switch with the "out-of-band" method described in the previous section and configure the Switch's IP address to the same class as your computer's IP address.
Below, is the Switch's default IP information:

IP Address: 192.168.0.100
Subnet Mask: 255.255.255.0
Gateway: 192.168.0.1

How to Modify Switch's IP address via Out-of-Band method

1. Login to the console (note: default User Name: admin, Password: admin).
2. Use "Tab" key to select (highlight) "Switch Static Configuration" and hit "Enter".
3. Use "Tab" key to select "Administration Configuration" and hit "Enter".
4. Use "Tab" key to select "IP Configuration" and hit "Enter".
5. Use "Tab" key to select "Edit" and hit "Enter".

6. Use "Tab" key to highlight "IP Address", enter the desired IP address (e.g. 192.168.0.100), and hit "Enter".
7. The "Subnet Mask" is now highlighted, enter the correct subnet mask, and hit "Enter".
8. Input the Gateway address and hit "Enter".
9. Press and hold "Ctrl" and then hit "A" to go to the "Action Menu".
10. Use "Tab" key to select "Save" and hit "Enter".
11. The screen will prompt you to "restart the system…", turn off the Switch, wait for 10 seconds, and then turn the Switch's power back on.

After the Switch finishes the self-diagnostic, open your computer's web browser and at the "Address:" field, enter the Switch's IP address (e.g. **http://192.168.0.100)**, hit "Enter" or click on "Go", and the Switch's login page will prompt you to enter "User Name" and Password" to login.
(Note: default User Name: **admin**, Password: **admin**).

How To Modify Your Network Adapter's IP address

You can change the network adapter's IP address in the Network Adapter's "Properties". We suggest that you change the network adapter's IP to the following settings:
IP Address: 192.168.0.101
Subnet Mask: 255.255.255.0
(Note: you don't need to enter a Gateway address at this time.)

Reboot your computer if necessary. After the computer restarts, open your web browser and at the "Address" field, enter **http://192.168.0.100** , hit "Enter" or click on "Go", and the Switch's login page will prompt you to enter "User Name" and Password" to login.
(Note: default User Name: **admin**, Password: **admin**).

For the complete configuration guide, please refer to the User's Guide on the CD-ROM.