



AT-FS705L

Fast Ethernet Switch

Installation Guide

Copyright © 2002 Allied Telesyn, Inc.
960 Stewart Drive Suite B, Sunnyvale CA 94085, USA

All rights reserved. No part of this publication may be reproduced without prior written permission from Allied Telesyn, Inc.

Ethernet is a registered trademark of Xerox Corporation. All other product names, company names, logos or other designations mentioned herein are trademarks or registered trademarks of their respective owners.

Allied Telesyn, Inc. reserves the right to make changes in specifications and other information contained in this document without prior written notice. The information provided herein is subject to change without notice. In no event shall Allied Telesyn, Inc. be liable for any incidental, special, indirect, or consequential damages whatsoever, including but not limited to lost profits, arising out of or related to this manual or the information contained herein, even if Allied Telesyn, Inc. has been advised of, known, or should have known, the possibility of such damages.

Electrical Safety and Emission Compliance Statements

Standards: This product meets the following standards:

U.S. Federal Communications Commission	
Declaration Of Conformity	
Manufacture Name:	Allied Telesyn, Inc.
Manufacture Address:	960 Stewart Drive, Suite B Sunnyvale, CA 94085 USA
Manufacture Telephone:	408-730-0950
Declares that the product:	Fast Ethernet Switch
Model Numbers:	AT-FS705L
This product complies with FCC Part 15B, Class B Limits:	
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device must not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.	
Radiated Energy	
Note: This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with instructions, may cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on. The user is encouraged to try to correct the interference by one or more of the following measures:	
- Reorient or relocate the receiving antenna. - Increase the separation between the equipment and the receiver. - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. - Consult the dealer or an experienced radio/TV technician for help.	
Changes and modifications not expressly approved by the manufacturer or registrant of this equipment can void your authority to operate this equipment under Federal Communications Commission rules.	

Industry Canada
This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.
Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

RFI Emission EN55022 Class B  1

Immunity EN55024  2

Electrical Safety EN60950 (TUV), UL60950 (cUL_{us})  3

Important: Appendix B contains translated safety statements for installing this equipment. When you see the , go to Appendix B for the translated safety statement in your language.

Wichtig: Anhang B enthält übersetzte Sicherheitshinweise für die Installation dieses Geräts. Wenn Sie  sehen, schlagen Sie in Anhang B den übersetzten Sicherheitshinweis in Ihrer Sprache nach.

Vigtigt: Tillæg B indeholder oversatte sikkerhedsadvarsler, der vedrører installation af dette udstyr. Når De ser symbolet , skal De slå op i tillæg B og finde de oversatte sikkerhedsadvarsler i Deres eget sprog.

Belangrijk: Appendix B bevat vertaalde veiligheidsopmerkingen voor het installeren van deze apparatuur. Wanneer u de  ziet, raadpleeg Appendix B voor vertaalde veiligheidsinstructies in uw taal.

Important: L'annexe B contient les instructions de sécurité relatives à l'installation de cet équipement. Lorsque vous voyez le symbole , reportez-vous à l'annexe B pour consulter la traduction de ces instructions dans votre langue.

Tärkeää: Liite B sisältää tämän laitteen asentamiseen liittyvät käännetyt turvaohjeet. Kun näet -symbolin, katso käännettyä turvaohjetta liitteestä B.

Importante: l'Appendice B contiene avvisi di sicurezza tradotti per l'installazione di questa apparecchiatura. Il simbolo , indica di consultare l'Appendice B per l'avviso di sicurezza nella propria lingua.

Viktig: Tillegg B inneholder oversatt sikkerhetsinformasjon for installering av dette utstyret. Når du ser , åpner du til Tillegg B for å finne den oversatte sikkerhetsinformasjonen på ønsket språk.

Importante: O Anexo B contém advertências de segurança traduzidas para instalar este equipamento. Quando vir o símbolo , leia a advertência de segurança traduzida no seu idioma no Anexo B.

Importante: El Apéndice B contiene mensajes de seguridad traducidos para la instalación de este equipo. Cuando vea el símbolo , vaya al Apéndice B para ver el mensaje de seguridad traducido a su idioma.

Obs! Bilaga B innehåller översatta säkerhetsmeddelanden avseende installationen av denna utrustning. När du ser , skall du gå till Bilaga B för att läsa det översatta säkerhetsmeddelandet på ditt språk.

Table of Contents

Electrical Safety and Emission Compliance Statements	iii
---	------------

Welcome to Allied Telesyn	vii
--	------------

Where to Find Web-based Guides	vii
--------------------------------------	-----

Documentation Conventions	vii
---------------------------------	-----

Contacting Allied Telesyn Technical Support.....	viii
--	------

Online Support	viii
----------------------	------

Telephone Support	viii
-------------------------	------

E-mail Support	viii
----------------------	------

Returning Products	ix
--------------------------	----

FTP Server	ix
------------------	----

For Sales or Corporate Information	ix
--	----

Tell Us What You Think	x
------------------------------	---

Chapter 1

Overview	1
-----------------------	----------

Features	2
----------------	---

Status LEDs.....	2
------------------	---

Twisted Pair Ports.....	3
-------------------------	---

Port Speed.....	3
-----------------	---

Duplex Mode.....	3
------------------	---

Auto MDI/MDI-X.....	4
---------------------	---

MAC Address Table.....	4
------------------------	---

Store and Forward.....	5
------------------------	---

Network Topologies	6
--------------------------	---

Standalone	6
------------------	---

Cascade	7
---------------	---

Uplink	8
--------------	---

Chapter 2

Installation	9
Verifying the Package Contents	9
Planning the Installation	10
Selecting a Site	10
Reviewing Safety Guidelines	11
Installing the Switch on a Desktop.....	12
Wall-Mounting the Switch	13
Warranty Registration	13

Chapter 3

Troubleshooting	15
------------------------------	----

Appendix A

Technical Specifications	17
Physical	17
Environmental	17
Electrical Rating	17
Agency Compliance.....	18
Pinout Assignments.....	18

Appendix B

Translated Safety and Emission Information	19
---	----

Welcome to Allied Telesyn

This guide contains instructions on how to install and configure the AT-FS705L Fast Ethernet Switch.

Where to Find Web-based Guides

The Allied Telesyn web site at **www.alliedtelesyn.com** offers you an easy way to access the most recent documentation, software, and technical information for all of our products. For product guides, select “Support & Services” from our web site.

Documentation Conventions

This guide uses the following conventions:

Note

Notes provide additional information.



Caution

Cautions indicate that performing or omitting a specific action may result in equipment damage or loss of data.



Warning

Warnings indicate that performing or omitting a specific action may result in bodily injury.

Contacting Allied Telesyn Technical Support

You can contact Allied Telesyn technical support online or by telephone or e-mail.

Online Support

You can request technical support online by accessing the Knowledge Base at **<http://kb.alliedtelesyn.com>**. You can use the Knowledge Base to submit questions to our technical support staff and review answers to previously asked questions.

Telephone Support

For technical support by phone, contact Allied Telesyn at one of the following locations:

Americas

United States, Canada, Mexico,
Central America, South America
Tel: 1 (800) 428-4835

Asia

Singapore, Taiwan, Thailand,
Malaysia, Indonesia, Korea,
Philippines, China,
India, Hong Kong
Tel: (+65) 3815-612

Australia

Tel: 1 (800) 000-880

France

France, Belgium, Luxembourg,
The Netherlands, Middle East, Africa
Tel: (+33) 0-1-60-92-15-25

Germany

Germany, Switzerland, Austria,
Eastern Europe
Tel: (+49) 30-435-900-126

Italy

Italy, Spain, Portugal, Greece, Turkey,
Israel
Tel: (+39) 02-41-30-41

Japan

Tel: (+81) 3-3443-5640

United Kingdom

United Kingdom, Denmark, Norway,
Sweden, Finland
Tel: (+0044) 1235-442500

E-mail Support

Latin America, Mexico, Puerto Rico, Caribbean, and Virgin Islands
latin_america@alliedtelesyn.com

Europe

support_europe@alliedtelesyn.com

Returning Products

Products for return or repair must first be assigned a Return Materials Authorization (RMA) number. A product sent to Allied Telesyn without a RMA number will be returned to the sender at the sender's expense.

To obtain an RMA number contact Allied Telesyn's Technical Support at one of the following locations:

North America

Toll-free: 1-800-762-1664

Fax: 1-425-806-1050

Europe, Africa, and the Middle East

Tel: +44-1793-501401

Fax: +44-1793-431099

Latin America, the Caribbean, and Virgin Islands

Tel: international code + 425-481-3852

Fax: international code + 425-481-3895

Puerto Rico

Tel: 1-800-424-5012, ext 3852 or

1-800-424-4284, ext 3852

Mexico

Toll-free: 800-424-5012, ext 3852

Fax: international code + 425-481-3895

Asia and Southeast Asia

Tel: +65-381-5612

Fax: +65-383-3830

Australia

Toll-free: 1-800-000-880

Fax: +61-2-9438-4966

New Zealand

Toll-free: 0800-45-5782

FTP Server

If you need management software for an Allied Telesyn managed device and you know the file name of the software, you can download the software by connecting directly to our FTP server at **ftp.alliedtelesyn.com**. At login, enter 'anonymous' as the user name and your e-mail address for the password.

For Sales or Corporate Information

You can contact Allied Telesyn for sales or corporate information at the location below:

Allied Telesyn, Inc.

19800 North Creek Parkway, Suite 200

Bothell, WA 98011

Tel: 1 (425) 487-8880

Fax: 1 (425) 489-9191

Tell Us What You Think

If you have any comments or suggestions on how we might improve this or other Allied Telesyn documents, please fill out the General Enquiry Form online. This form can be accessed by selecting “Contact Us” from **www.alliedtelesyn.com**.

Chapter 1

Overview

The AT-FS705L is an unmanaged Layer 2 switch. This switch can be used in a variety of network configurations and topologies. You can use the switch to create small workgroups with dedicated 10 Mbps and 100 Mbps links to your network devices, such as workstations, servers, printers, and routers. You can also use the switch to interconnect Ethernet hubs to provide a bridge between the different workgroups of your network. Finally, you can connect the switches to other Ethernet switches so that they can be part of a larger Ethernet network.

The AT-FS705L switch features five 10Base-T/100Base-TX twisted pair ports. Each twisted pair port has an RJ-45 connector with a maximum operating distance of 100 meters (328 feet). The twisted pair port can operate at 10 Mbps or 100 Mbps and in half- or full-duplex mode.

The AT-FS705L switch can be used on a desktop or mounted on a wall. The switch is easy to install and does not require software configuration or management.

Figure 1 illustrates the front and back panels of the AT-FS705L switch.

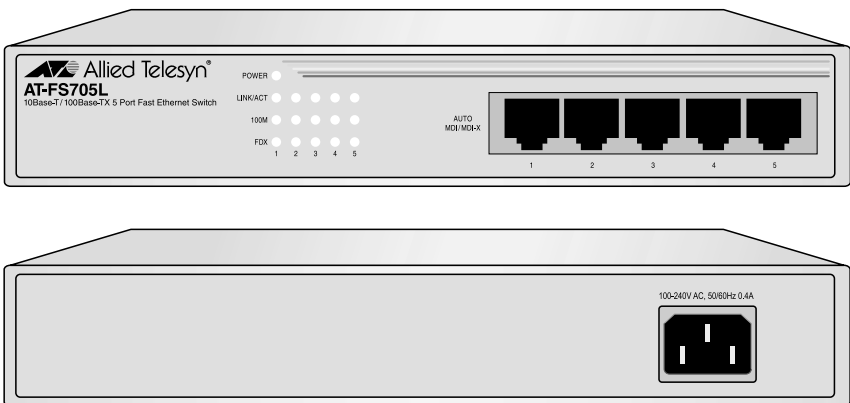


Figure 1 AT-FS705L Switch Front and Back Panels

Features

- ☐ LEDs for unit and port status
- ☐ Auto MDI/MDI-X on the twisted pair ports
- ☐ Half- or full-duplex operation on both ports
- ☐ Five RJ-45 twisted pair connectors
- ☐ Store and forward switching mode
- ☐ MAC address table with a capacity of 2,000 addresses
- ☐ Small compact size for use on a desktop or wall-mountable

Status LEDs

Table 1 defines the LEDs for the switch.

Table 1 Status LEDs

LED	Color	Description
POWER	Green	Power is applied to the switch.
LINK/ACT	Green Blinking	A valid link has been established on the port. Data is being received or transmitted on the port.
100M	Green OFF	The port is operating at 100 Mbps. The port is operating at 10 Mbps.
FDX	Green OFF	The port is operating in full-duplex mode. The port is operating in half-duplex mode.

Twisted Pair Ports

The AT-FS705L switch has five 10Base-T/100Base-TX twisted pair ports. Each twisted pair port features a RJ-45 connector. The maximum operating distance for the twisted pair ports is 100 meters (328 feet) when operating at either 10 Mbps or 100 Mbps.

Port Speed

The twisted pair ports are compliant with the 10Base-T and 100Base-TX standards and are capable of either 10 Mbps or 100 Mbps operation. Since the ports are IEEE 802.3u auto-negotiation compliant, the switch will set the port speed automatically. With auto-negotiation, the speed of the ports are set automatically by the switch after it determines the speed of the end-node connected to the port. Auto-negotiation is designed to ensure that the port on the switch and the end-node are operating at the same speed and that they are communicating at the highest possible common speed of the devices.

Duplex Mode

Duplex mode refers to the way an end-node sends and receives data on the network. An end-node can operate in either half- or full-duplex mode depending on its capabilities. An end-node that is operating in half-duplex mode can either send data or receive data, but it cannot do both at the same time. An end-node that is operating in full-duplex mode can send and receive data simultaneously. The best network performance is achieved when an end-node can operate at full-duplex, since the end-node is able to send and receive data simultaneously.

The twisted pair ports on the AT-FS705L switch can operate in either half-duplex or full-duplex mode. The switch sets the duplex mode automatically through auto-negotiation. With auto-negotiation, if the end-node is capable of full-duplex, the port is set automatically to full-duplex mode. If the end-node is capable of half-duplex, the port is set automatically to half-duplex mode.

Auto MDI/MDI-X

An RJ-45 twisted pair port on a 10 Mbps or 100 Mbps Ethernet network device can have one of two possible wiring configurations: MDI or MDI-X. A RJ-45 port on a PC, router, or bridge is typically wired as MDI, while a twisted pair port on a switch or hubs is usually MDI-X.

To connect two 10 Mbps or 100 Mbps network devices together that have dissimilar port wiring configurations, such as an MDI to MDI-X, you would use a straight-through twisted pair cable. To connect two networks devices that have the same wiring configuration, such as MDI to MDI, you would use a crossover cable.

The AT-FS705L switch features automatic MDI/MDI-X. The RJ-45 port automatically determines the configurations of the port on the device to which it is connected and then configures itself appropriately. For example, if a port on a switch is connected to a port on a bridge, which is typically wired as MDI, the port on the switch automatically configures itself as MDI-X. This feature allows you to use either a crossover cable or a straight-through cable when connecting a device to a twisted pair port.

MAC Address Table

The heart of an Ethernet switch is the Media Access Control (MAC) address table. Every device that you attach to an Ethernet network has a MAC address. This address is assigned to the device by the device's manufacturer. For example, each Network Interface Card (NIC) that you install into your network computers has a MAC address that was assigned to it by the card's manufacturer.

A switch's MAC address table is a list of the MAC addresses of the devices that are connected to its ports. The switch uses this table to direct data frames to their appropriate destination end-nodes, and in some cases, to discard frames that it receives. The switch creates the MAC address table by examining the frames that it receives on its ports. Each frame is examined for its source address; that is, the MAC address of the end-node that sent the frame. The switch checks to determine whether the address is already in its MAC address table. If it is not, the switch adds the address to the table along with the port number on which the frame was received. The result is a table that contains a list of all the MAC addresses of end-nodes that have sent frames to the switch and the ports on the switch to which the end-nodes are connected.

The switch also checks the destination MAC address of each frame it receives. The destination address is the MAC address of the end-node to which the frame is intended. If the address is in the table, the switch directs the frame directly to the port where the end-node is located. This helps to ensure that end-nodes will only receive traffic that is intended for them and not have to deal with traffic intended for other end-nodes.

If the destination address is not in the MAC address table, the switch broadcasts the frame to all switch ports. When the destination end-node responds, the switch will be able to match the address to a port so that the next time a frame is destined to that particular end-node, the switch will be able to forward the frame to the correct port instead of having to broadcast the frame to all ports.

In some cases a switch will even discard a frame. If the switch receives a frame that is destined to an end-node on the same port on which the frame was received, the switch discards the frame.

The MAC address table in the AT-FS705L switch can store up to 2,000 MAC addresses. To prevent the table from becoming filled with addresses of end-nodes that are no longer active, the switch has a MAC address aging timer. This timer will delete a MAC address from the table if it does not see a frame from the end-node with the address on any port after five minutes (300 seconds). The aging timer also helps to ensure that the table is correct should an end-node be moved from one port on the switch to another port.

Store and Forward

The AT-FS705L switch supports store and forward switching at Fast Ethernet full-wire speed. Packets entering each port are stored in buffers. Once the full packet is received, the switch will forward or discard the packet, depending on its destination address and error status. This ensures that only error-free packets destined for another segment will be transferred across the switch, reducing network load. For example, if the packet entering from Port 1 is destined for an end-node on Port 2, the switch forwards the frame if the frame does not contain any errors. If the packet from Port 1 is destined for an end-node also connected to Port 1, the packet is discarded.

Network Topologies

The AT-FS705L switch can be used in three different topologies: standalone, cascade, and uplink. Each topology is describe below.

Standalone

A standalone topology uses one switch to connect the end-nodes. Figure 2 illustrates a standalone topology that uses an AT-FS705L switch to connect several workstations and a server.

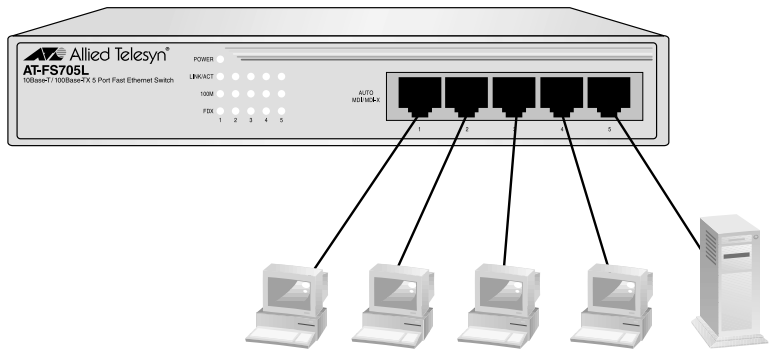


Figure 2 Standalone Topology

Cascade

Figure 3 illustrates two AT-FS705L switches connected together to support multiple network segments. This is commonly referred to as 'cascading.'

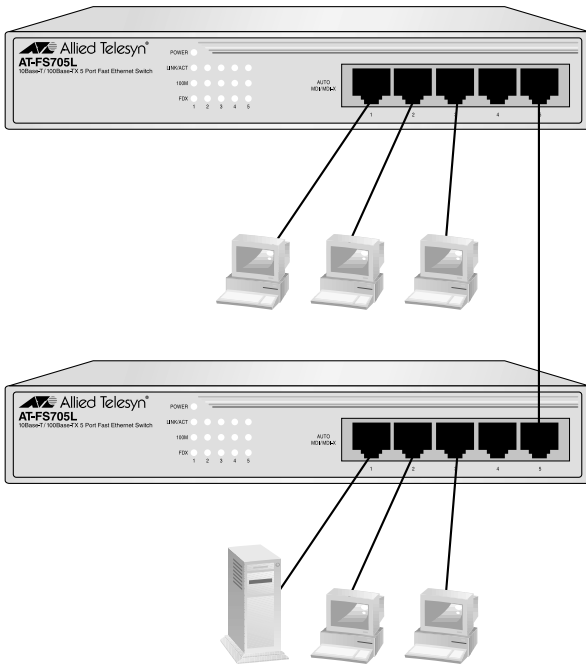


Figure 3 Cascading Topology

Uplink

Figure 4 illustrates multiple AT-FS705L switches can be interconnected using uplinks from a centralized backbone Fast Ethernet switch.

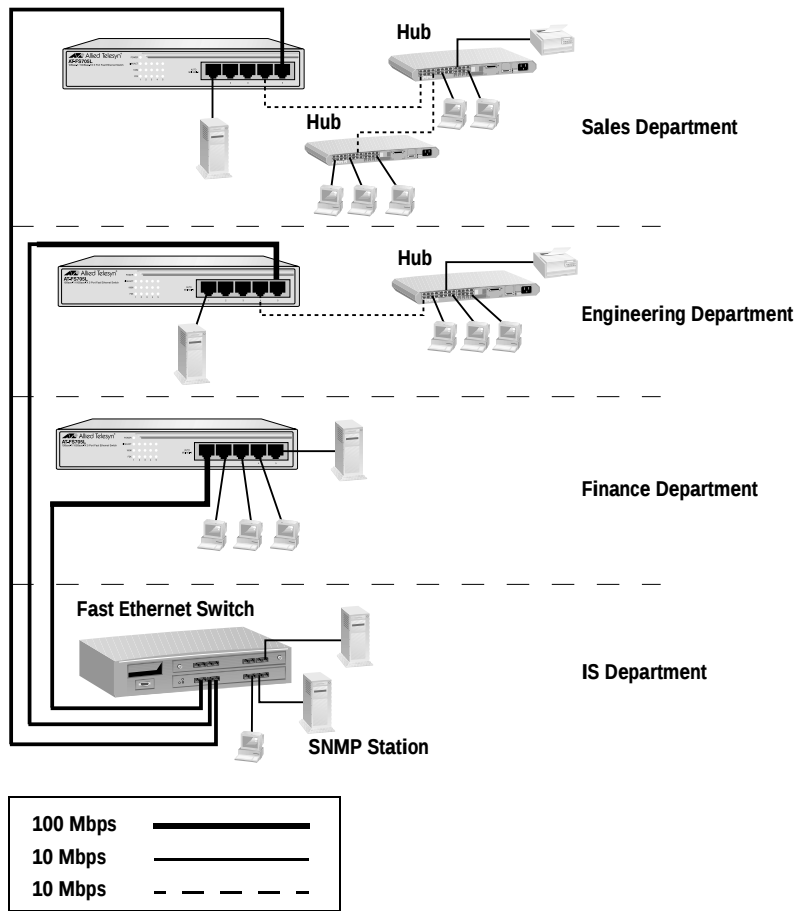


Figure 4 Uplink Topology

Chapter 2

Installation

This chapter contains the installation instructions for the AT-FS705L switch. This switch can be used on a desktop or mounted on a wall.

Verifying the Package Contents

Make sure the following items are included in your package. If any item is missing or damaged, contact your Allied Telesyn sales representative for assistance.

- ☐ One AT-FS705L Fast Ethernet Switch
- ☐ Four protective feet (for desktop use only)
- ☐ Power cord
- ☐ This installation guide
- ☐ Warranty card

Planning the Installation

Be sure to observe the following guidelines when planning the installation of your switch.

- ☐ The end-nodes connected to the twisted pair ports can operate at 10 Mbps or 100 Mbps and half or full-duplex. The switch uses auto-negotiation to determine the correct speed and duplex mode for each port.
- ☐ The twisted pair port cabling must be kept away from sources of electrical noise, such as radios, transmitters, power lines, broadband amplifiers electrical motors, and fluorescent fixtures.
- ☐ Refer to Table 2 for the cabling specifications for the twisted pair ports.

Table 2 10Base-T/100Base-TX Twisted Pair Port Cabling Specifications

Operating Mode	Twisted Pair Cable	Maximum Operating Distance
10Base-T	Shielded or Unshielded Category 3 or better	100 m (328 ft)
100Base-TX	Shielded or Unshielded Category 5 or better	100 m (328 ft)

Selecting a Site

Be sure to observe the following requirements when choosing a site for your switch.

- ☐ Select a site that is dust-free and moisture-free.
- ☐ Be sure that the site will allow you to easily access the twisted pair cables and the power cord.
- ☐ Use a dedicated power circuit or a power conditioner to supply reliable power to the device.

Reviewing Safety Guidelines

Please review the following safety guidelines before installing the AT-FS705L switch.



Warning

Electrical Shock Hazard: To prevent electrical shock, do not remove the cover. There are no user-serviceable parts inside. The unit contains hazardous voltages and should only be opened by a trained and qualified technician. ⚡ 4



Warning

Lightning Danger: Do not work on equipment or cables during periods of lightning activity. ⚡ 5



Caution

Power cord is used as a disconnection device: To de-energize equipment, disconnect the power cord. ⚡ 7



Caution

Pluggable Equipment: The socket outlet should be installed near the equipment and should be easily accessible. ⚡ 9



Caution

Air vents: The air vents must not be blocked on the unit and must have free access to the room ambient air for cooling. ⚡ 10



Caution**Operating Temperature**

This product is designed for a maximum ambient temperature of 40 degrees C. ⚡ 11



Caution

All Countries: Install product in accordance with local and National Electrical Codes. ⚡ 12

Installing the Switch on a Desktop

The AT-FS705L switch can be used on a desktop or mounted on a wall. To wall-mount the switch, refer to “Wall-Mounting the Switch” on page 13.

To install an AT-FS705L switch on a desktop, perform the following procedure:

1. Remove all equipment from the package and store the packaging material in a safe location.
2. If you are installing the switch on a desktop, attach the four protective feet to the bottom on the unit. See Figure 5. **Do not attach the protective feet if you are wall-mounting the switch.**

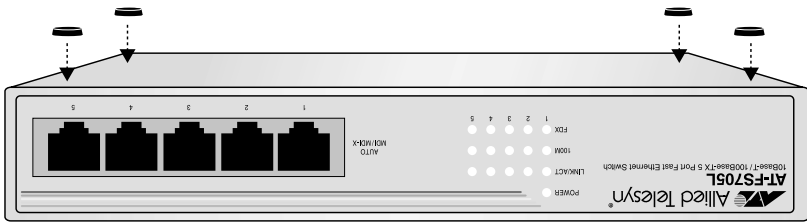


Figure 5 Attaching the Protective Feet

3. Place the switch on a flat, secure surface (such as a desk or table) leaving ample space around the unit for ventilation.
4. Connect the twisted pair cables to the twisted pair ports.



Caution

Power cord is used as a disconnection device: To de-energize equipment, disconnect the power cord. 7

5. Power ON the switch by plugging one end of the power cord to the back of the switch and the other end of the power cord to a power outlet.
6. Verify that the POWER LED is green. If the LED is OFF, refer to “Troubleshooting” on page 15 for instructions.
7. Power ON the end-nodes connected to the switch.
8. Check the LINK/ACT LEDs for each port is green. If a LED is OFF, refer to “Troubleshooting” on page 15 for instructions.

The switch is now ready for use.

Wall-Mounting the Switch

The switch can be mounted horizontally on a wall using the keyholes on the bottom of the switch. The screws, plastic anchors, and other materials necessary to mount the switch on a wall are not provided.

To wall-mount the switch, perform the following procedure:

1. If attached, remove the rubber feet, data cables, and power cord from the switch.
2. Select a wall location for the device.
3. Install two plastic anchors and two screws into the wall, separated by 85.34 millimeters (3.36 inches).
4. Position the switch onto the wall screws so that the ports and LEDs are facing up.



Caution

Power cord is used as a disconnection device: To de-energize equipment, disconnect the power cord. *See* 7

5. Power ON the switch by plugging one end of the power cord to the back of the switch and the other end of the power cord to a power outlet.
6. Verify that the POWER LED is green. If the LED is OFF, refer to “Troubleshooting” on page 15 for instructions.
7. Connect the twisted pair cables to the twisted pair ports.
8. Power ON the end-nodes connected to the switch.
9. Check the LINK/ACT LEDs for each port is green. If a LED is OFF, refer to “Troubleshooting” on page 15 for instructions.

The switch is now ready for use.

Warranty Registration

When you have finished installing the switch, you should register your switch by completing the enclosed warranty card and sending it in.

Chapter 3

Troubleshooting

Follow the guidelines below to test and troubleshoot the installation in the event a problem occurs.

If the POWER LED is OFF, do the following:

- ☐ Make sure that the power cord is securely connected to the wall outlet and the power connector is securely connected to the back of the switch.
- ☐ Verify that the power outlet has power by connecting another device to it.
- ☐ Try using another power cord of the same type that came with your switch.

If a LINK/ACT LED is OFF, do the following:

- ☐ Check that the end-node connected to the port is powered ON and is operating properly.
- ☐ Check that the twisted pair cable is securely connected to the port on the switch and to the port on the end-node.
- ☐ Verify that the end-node connected to the port and the switch are operating at the same speed. Both must be operating at either 10 Mbps or 100 Mbps.
- ☐ Make sure that the twisted pair cable does not exceed 100 meters (328 feet) and that you are using a Category 3 or better cable for 10Base-T operation or a Category 5 or better cable for 100Base-TX operation.

If there is a communication problem between the end-nodes connected to the switch, do the following:

- ❑ Verify that the end-nodes are operating with the same duplex mode.

If you are still experiencing problems after testing and troubleshooting the installation, refer to “Contacting Allied Telesyn Technical Support” on page viii or visit our web site at **www.alliedtelesyn.com** for support information.

Appendix A

Technical Specifications

Physical

Dimensions:	W x D x H 197 mm x 117 mm x 37 mm (7.75 in x 4.59 in x 1.45 in)
Weight:	0.610 kg (1.35 lbs)

Environmental

Maximum Operating:	0° to 40° C (32° to 104° F)
Maximum Storage:	-20° to 80° C (-4° F to 176° F)
Relative Humidity Operating and Storage:	5% to 95% (non-condensing)
Operating and Storage Altitude:	Up to 3,048 meters (10,000 feet)

Electrical Rating

Input Supply Voltage:	100 - 240 V AC, 50/60 Hz
Maximum Current:	0.4A
Power Consumption:	5.0W maximum

Agency Compliance

EMI/RFI:	FCC Class B, EN55022 Class B
Electrical Safety:	cCSA _{us} , TUV
Immunity:	EN55024

Pinout Assignments

Figure 6 shows the pinout assignments for the RJ-45 connector.

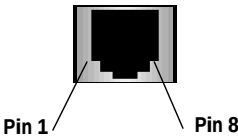


Figure 6 RJ-45 Pin Assignments

Table 3 lists the 10Base-T/100Base-TX connector pins and their signals when the port is operating in either MDI or MDI-X configuration.

Table 3 RJ-45 Pin Signals

MDI-X (Default)	Signal	MDI	Signal
1	RX+	1	TX+
2	RX-	2	TX-
3	TX+	3	RX+
4	-	4	-
5	-	5	-
6	TX-	6	RX-
7	-	7	-
8	-	8	-

Appendix B

Translated Safety and Emission Information

Important: This appendix contains multiple-language translations for the safety statements in this guide.

Wichtig: Dieser Anhang enthält Übersetzungen der in diesem Handbuch enthaltenen Sicherheitshinweise in mehreren Sprachen.

Vigtigt: Dette tillæg indeholder oversættelser i flere sprog af sikkerhedsadvarslerne i denne håndbog.

Belangrijk: Deze appendix bevat vertalingen in meerdere talen van de veiligheidsopmerkingen in deze gids.

Important: Cette annexe contient la traduction en plusieurs langues des instructions de sécurité figurant dans ce guide.

Tärkeää: Tämä liite sisältää tässä oppaassa esiintyvät turvaohjeet usealla kielellä.

Importante: questa appendice contiene traduzioni in più lingue degli avvisi di sicurezza di questa guida.

Viktig: Dette tillegget inneholder oversettelser til flere språk av sikkerhetsinformasjonen i denne veiledningen.

Importante: Este anexo contém traduções em vários idiomas das advertências de segurança neste guia.

Importante: Este apéndice contiene traducciones en múltiples idiomas de los mensajes de seguridad incluidos en esta guía.

Obs! Denna bilaga innehåller flerspråkiga översättningar av säkerhetsmeddelandena i denna handledning.

Standards: This product meets the following standards.

U.S. Federal Communications Commission	
Declaration Of Conformity	
Manufacture Name:	Allied Telesyn, Inc.
Manufacture Address:	960 Stewart Drive, Suite B Sunnyvale, CA 94085 USA
Manufacture Telephone:	408-730-0950
Declares that the product:	Fast Ethernet Switch
Model Numbers:	AT-FS705L
This product complies with FCC Part 15B, Class B Limits:	
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device must not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.	
Radiated Energy	
Note: This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with instructions, may cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on. The user is encouraged to try to correct the interference by one or more of the following measures:	
- Reorient or relocate the receiving antenna. - Increase the separation between the equipment and the receiver. - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. - Consult the dealer or an experienced radio/TV technician for help.	
Changes and modifications not expressly approved by the manufacturer or registrant of this equipment can void your authority to operate this equipment under Federal Communications Commission rules.	

Industry Canada	
This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.	
Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.	

 1	RFI Emission	EN55022 Class B
 2	Immunity	EN55024
 3	Electrical Safety	EN60950 (TUV), UL60950 (cUL-us)

Safety

4



Electrical Notices

Warning: Electric Shock Hazard

To prevent electric shock, do not remove the cover. No user-serviceable parts inside. This unit contains hazardous voltages and should only be opened by a trained and qualified technician. To avoid the possibility of electric shock, disconnect electric power to the product before connecting or disconnecting the LAN cables.

5



Lightning Danger

Danger: Do not work on equipment or cables during periods of lightning activity.

Installation

6



Electrical - Auto Voltage Adjustment

This product will automatically adjust to any voltage between the ranges shown on the label

7



Caution: Power cord is used as a disconnection device. To de-energize equipment, disconnect the power cord.

8



Electrical - Type Class 1 Equipment

This Equipment Must Be Earthed. Power plug must be connected to a properly wired earth ground socket outlet. An improperly wired socket outlet could place hazardous voltages on accessible metal parts.

9



Pluggable equipment, the socket outlet shall be installed near the equipment and shall be easily accessible.

10



Caution: Air vents must not be blocked and must have free access to the room ambient air for cooling.

11



Operating Temperature: This product is designed for a maximum ambient temperature of 40° degrees C.

12



All Countries: Install product in accordance with Local and National Electrical Codes.

Normen: Dieses Produkt erfüllt die Anforderungen der nachfolgenden Normen.

1

Hochfrequenzstörung

EN55022 Klasse B

2

Störsicherheit

EN55024

3

Elektrische Sicherheit

EN60950 (TUV), UL60950 (cULus)

Sicherheit

4



Achtung:

Gefährliche Spannung

Das Gehäuse nicht öffnen. Das Gerät enthält keine vom Benutzer wartbaren Teile. Das Gerät steht unter Hochspannung und darf nur von qualifiziertem technischem Personal geöffnet werden. Vor Anschluß der LAN-Kabel, Gerät vom Netz trennen.

5



Gefahr Durch Blitzschlag

Gefahr: Keine Arbeiten am Gerät oder an den Kabeln während eines Gewitters ausführen.

Installation

- 6  **Automatische Spannungseinstellung**
Dieses Gerät stellt sich automatisch auf die auf dem Etikett aufgeführten Spannungswerte ein
- 7  **Vorsicht:** Das netzkabel dient zum trennen der stromversorgung. Zur trennung vom netz, kabel aus der steckdose ziehen.
- 8  **Geräte Der Klasse 1** Diese Geräte Müssen Geerdet Sein. Der Netzstecker darf nur mit einer vorschriftsmäßig geerdeten Steckdose verbunden werden. Ein unvorschriftsmäßiger Anschluß kann die Metallteile des Gehäuses unter gefährliche elektrische Spannungen setzen.
- 9  **Steckbares Gerät:** Die Anschlußbuchse sollte in der Nähe der Einrichtung angebracht werden und leicht zugänglich sein."
- 10  **Vorsicht:** Die Entlüftungsöffnungen dürfen nicht versperrt sein und müssen zum Kühlen freien Zugang zur Raumluft haben.
- 11  **Betriebstemperatur:** Dieses Produkt wurde für den Betrieb in einer Umgebungstemperatur von nicht mehr als 40° C entworfen.
- 12  **Alle Länder:** Installation muß örtlichen und nationalen elektrischen Vorschriften entsprechen.

Standarder: Dette produkt tilfredsstiller de følgende standarder.

- 1 Radiofrekvens forstyrrelsesemission EN55022 Klasse B
- 2 Immunitet EN55024
- 3 Elektrisk sikkerhed EN60950 (TUV), UL60950 (cUL_{us})

Sikkerhed

- 4  **Elektriske Forholdsregler**
Advarsel: Risiko For Elektrisk Stød
For at forebygge elektrisk stød, undlad at åbne apparatet. Der er ingen indre dele, der kan repareres af brugeren. Denne enhed indeholder livsfarlige strømspændinger og bør kun åbnes af en uddannet og kvalificeret tekniker. For at undgå risiko for elektrisk stød, afbrydes den elektriske strøm til produktet, før LAN-kablerne monteres eller afmonteres.

- 5  **Fare Under Uvejr**
Fare: Undlad at arbejde på udstyr eller kabler i perioder med lynaktivitet.

Installation

- 6  **Elektrisk - Automatisk Spændingsregulering**
Dette apparat vil automatisk tilpasse sig enhver spænding indenfor de værdier, der er angivet på etiketten.
- 7  **Advarsel:** Den strømførende ledning bruges til at afbryde strømmen. Skal strømmen til apparatet afbrydes, tages ledningen ud af stikket.
- 8  **Elektrisk - Klasse 1 Udstyr**
Dette Udstyr Kræver Jordforbindelse. Stikket skal være forbundet med en korrekt installeret jordforbunden stikkontakt. En ukorrekt installeret stikkontakt kan sætte livsfarlig spænding til tilgængelige metaldele.
- 9  **Udstyr til stikkontakt, stikkontakten bør installeres nær ved udstyret og skal være lettilgængelig.**
- 10  **Advarsel:** Ventilationsåbninger må ikke blokeres og skal have fri adgang til den omgivende luft i rummet for afkøling.

- 11  **Betjenningstemperatur:** Dette apparat er konstrueret til en omgivende temperatur på maksimum 40 grader C.
- 12  **Alle Lande:** Installation af produktet skal ske i overensstemmelse med lokal og national lovgivning for elektriske installationer.

Eisen: Dit product voldoet aan de volgende eisen.

- | | | |
|---|------------------------|---|
| 1 | RFI Emissie | EN55022 Klasse B |
| 2 | Immunitet | EN55024 |
| 3 | Electrische Veiligheid | EN60950 (TUV), UL60950 (cUL _{us}) |

Veiligheid

- 4  **Waarschuwingen Met Betrekking Tot Elektriciteit**
Waarschuwing: Gevaar Voor Elektrische Schokken
 Verwijder het deksel niet, teneinde elektrische schokken te voorkomen. Binnenin bevinden zich geen onderdelen die door de gebruiker onderhouden kunnen worden. Dit toestel staat onder gevaarlijke spanning en mag alleen worden geopend door een daartoe opgeleide en bevoegde technicus. Om het gevaar op elektrische schokken te vermijden, moet u het toestel van de stroombron ontkoppelen alvorens de LAN-kabels te koppelen of ontkoppelen.
- 5  **Gevaar Voor Blikseminslag**
Gevaar: Niet aan toestellen of kabels werken bij bliksem.

Installatie

- 6  **Elektrisch Automatische Aanpassing Van De Spanning**
 Dit toestel past zich automatisch aan elke spanning aan, tussen de op het label vermelde waarden.
- 7  **Waarschuwing:** Het toestel wordt uitgeschakeld door de stroomkabel te ontkoppelen. Om het toestel stroomloos te maken. De stroomkabel ontkoppelen.
- 8  **Elektrische Toestellen Van Klasse 1**
 Dit toestel moet geaard worden. De stekker moet aangesloten zijn op een juist geaarde contactdoos. Een onjuist geaarde contactdoos kan de metalen onderdelen waarmee de gebruiker eventueel in aanraking komt onder gevaarlijke spanning stellen.
- 9  **Aan te sluiten apparatuur, de contactdoos wordt in de nabijheid van de apparatuur geïnstalleerd en is gemakkelijk te bereiken.**
- 10  **Opgelet:** De ventilatiegaten mogen niet worden gesperd en moeten de omgevingslucht ongehinderd toelaten voor afkoeling.
- 11  **Bedrijfstemperatuur:** De omgevingstemperatuur voor dit produkt mag niet meer bedragen dan 40 graden Celsius.
- 12  **Alle Landen:** het toestel installeren overeenkomstig de lokale en nationale elektrische voorschriften.

Normes: ce produit est conforme aux normes de suivantes:

- | | | |
|-----|---|---------------------------------|
| ✍ 1 | Emission d'interférences radioélectriques | EN55022 Classe B |
| ✍ 2 | Immunité | EN55024 |
| ✍ 3 | Sécurité électrique | EN60950 (TUV), UL60950 (cUL-us) |

Sécurité

- ✍ 4  **Information Sur Les Risques Électriques**
Avertissement: Danger D'électrocution
 Pour éviter toute électrocution, ne pas ôter le revêtement protecteur du matériel. Ce matériel ne contient aucun élément réparable par l'utilisateur. Il comprend des tensions dangereuses et ne doit être ouvert que par un technicien dûment qualifié. Pour éviter tout risque d'électrocution, débrancher le matériel avant de connecter ou de déconnecter les câbles LAN.

- ✍ 5  **Danger De Foudre**
Danger: Ne pas manier le matériel ou les câbles lors d'activité orageuse.

Installation

- ✍ 6  **Réglage De Tension Automatique Électrique**
 Ce matériel peut s'ajuster automatiquement sur n'importe quelle tension comprise dans la plage indiquée sur l'étiquette.
- ✍ 7  **Attention:** Le cordon d'alimentation sert de mise hors circuit. Pour couper l'alimentation du matériel, débrancher le cordon.
- ✍ 8  **Équipement De Classe 1 Électrique**
 Ce matériel doit être mis à la terre. La prise de courant doit être branchée dans une prise femelle correctement mise à la terre car des tensions dangereuses risqueraient d'atteindre les pièces métalliques accessibles à l'utilisateur.
- ✍ 9  **Équipement pour branchement électrique, la prise de sortie doit être placée près de l'équipement et facilement accessible".**
- ✍ 10  **Attention:** Ne pas bloquer les fentes d'aération, ceci empêcherait l'air ambiant de circuler librement pour le refroidissement.
- ✍ 11  **Température De Fonctionnement:** Ce matériel est capable de tolérer une température ambiante maximum de ou 40 degrés Celsius.
- ✍ 12  **Pour Tous Pays:** Installer le matériel conformément aux normes électriques nationales et locales.

Standardit: Tämä tuote on seuraavien standardien mukainen.

- | | | | |
|--|----------|------------------------|---|
|  | 1 | Radioaaltojen häirintä | EN55022 Luokka B |
|  | 2 | Kestävyys | EN55024 |
|  | 3 | Sähköturvallisuus | EN60950 (TUV), UL60950 (cUL _{us}) |

Turvallisuus

-  **4**  **Sähköön Liittyviä Huomautuksia**
Varoitus: Sähköiskuvaara
 Estääksesi sähköiskun älä poista kantta. Sisällä ei ole käyttäjän huollettavissa olevia osia. Tämä laite sisältää vaarallisia jännitteitä ja sen voi avata vain koulutettu ja pätevä teknikko. Välttääksesi SÄHKÖISKUN mahdollisuuden katkaise sähkövirta tuotteeseen ennen kuin liität tai irrotat paikallisverkon (LAN) kaapelit.
-  **5**  **Salamaniskuvaara**
Hengenvaara: Älä työskentele laitteiden tai kaapeleiden kanssa salamoinnin aikana.
- Asennus**
-  **6**  **Sähkö- Automaattinen Jännitteensäätö**
 Tämä tuote säättää automaattisesti mihin tahansa jännitteeseen ohjetarrassa annettujen arvojen välillä.
-  **7**  **Huomautus:** Virtajohtoa käytetään virrankatkaisulaitteena. Virta katkaistaan irrottamalla virtajohto.
-  **8**  **Sähkö - Tyypiluokan 1 Laitteet**
 Tämä Laite Täytyy Maadoittaa. Pistoke täytyy liittää kunnollisesti maadoitettuun pistorasiaan. Virheellisesti johdotettu pistorasia voi altistaa metalliosat vaarallisille jännitteille.
-  **9**  **Pistorasiaan kytkettävä laite; pistorasia on asennettava laitteen lähelle ja siihen on oltava esteetön pääsy."**
-  **10**  **Huomautus:** Ilmavaihtoreikiä ei pidä tukkia ja niillä täytyy olla vapaa yhteys ympäröivään huoneilmaan, jotta ilmanvaihto tapahtuisi.
-  **11**  **Käyttölämpötila:** Tämä tuote on suunniteltu ympäröivän ilman maksimilämpötilalle 40°C.
-  **12**  **Kaikki Maat:** Asenna tuote paikallisten ja kansallisten sähköturvallisuusmääräysten mukaisesti.

Standard: Questo prodotto è conforme ai seguenti standard.

- | | | |
|--|--|---|
|  1 | Emissione RFI (interferenza di radiofrequenza) | EN55022 Classe B |
|  2 | Immunità | EN55024 |
|  3 | Sicurezza elettrica | EN60950 (TUV), UL60950 (cUL _{us}) |

Norme Di Sicurezza

-  **Avvertenze Elettriche**
Attenzione: Pericolo Di Scosse Elettriche
 Per evitare scosse elettriche non asportare il coperchio. Le componenti interne non sono riparabili dall'utente. Questa unità ha tensioni pericolose e va aperta solamente da un tecnico specializzato e qualificato. Per evitare ogni possibilità di scosse elettriche, interrompere l'alimentazione del dispositivo prima di collegare o staccare i cavi LAN.

-  **Pericolo Di Fulmini**
Pericolo: Non lavorare sul dispositivo o sui cavi durante precipitazioni temporalesche.

Installazione

-  **Elettricità - Regolazione Automatica Della Tensione**
 Questo prodotto regolerà automaticamente la tensione ad un valore compreso nella gamma indicata sull'etichetta
-  **Attenzione:** Il cavo di alimentazione è usato come dispositivo di disattivazione. Per togliere la corrente al dispositivo staccare il cavo di alimentazione.
-  **Elettricità - Dispositivi Di Classe 1**
 Questo Dispositivo Deve Avere La Messa A Terra. La spina deve essere inserita in una presa di corrente specificamente dotata di messa a terra. Una presa non cablata in maniera corretta rischia di scaricare una tensione pericolosa su parti metalliche accessibili.
-  **Apparecchiatura collegabile, la presa va installata vicino all'apparecchio per risultare facilmente accessibile".**
-  **Attenzione:** le prese d'aria non vanno ostruite e devono consentire il libero ricircolo dell'aria ambiente per il raffreddamento.
-  **Temperatura Di Funzionamento:** Questo prodotto è concepito per una temperatura ambientale massima di 40 gradi centigradi.
-  **Tutti I Paesi:** installare il prodotto in conformità delle vigenti normative elettriche nazionali.

Sikkerhetsnormer: Dette produktet tilfredsstiller følgende sikkerhetsnormer.

- | | | | |
|--|----------|---------------------|---|
|  | 1 | RFI stråling | EN55022 Klasse B |
|  | 2 | Immunitet | EN55024 |
|  | 3 | Elektrisk sikkerhet | EN60950 (TUV), UL60950 (cUL _{us}) |

Sikkerhet

- | | | |
|--|-----------|--|
|  | 4 |  Elektrisitet
Advarsel: Fare For Elektrisk Sjøkk
For å unngå elektrisk sjokk, må dekslet ikke tas av. Det finnes ingen deler som brukeren kan reparere på innsiden. Denne enheten inneholder farlige spenninger, og må kun åpnes av en faglig kvalifisert tekniker. For å unngå elektrisk sjokk må den elektriske strømmen til produktet være avslått før LAN-kablene til- eller frakobles. |
|  | 5 |  Fare For Lynnedslag
Fare: Arbeid ikke på utstyr eller kabler i tordenvær.

Installasjon |
|  | 6 |  Elektrisk - Auto Spenningstilpasning
Dette produktet vil automatisk bli tilpasset hvilken som helst strømspenning i de områdene som vises på etiketten. |
|  | 7 |  Forsiktig: Strømledningen brukes til å frakoble utstyret. For å deaktivisere utstyret, må strømforsyningen kobles fra. |
|  | 8 |  Elektrisk - Type 1- Klasse Utstyr
Dette utstyret må jordes. Strømkontakten må være tilkopleet en korrekt jordet kontakt. En kontakt som ikke er korrekt jordet kan føre til farlig spenninger i lett t ilgjengelige metalleder. |
|  | 9 |  Utstyr for stikkontakt. Stikkontakten skal monteres i nærheten av utstyret og skal være lett tilgjengelig." |
|  | 10 |  Forsiktig: Lufteventilene må ikke blokkeres, og må ha fri tilgang til luft med romtemperatur for avkjøling. |
|  | 11 |  Driftstemperatur: Dette produktet er konstruert for bruk i maksimum romtemperatur på 40 grader celsius. |
|  | 12 |  Alle Land: Produktet må installeres i samsvar med de lokale og nasjonale elektriske koder. |

Padrões: Este produto atende aos seguintes padrões.

- | | | |
|--|---|---------------------------------|
|  1 | Emissão de interferência de radiofrequência | EN55022 Classe B |
|  2 | Imunidade | EN55024 |
|  3 | Segurança Eléctrica | EN60950 (TUV), UL60950 (cUL-us) |

Segurança

-  4 **Avisos Sobre Características Eléctricas**



Atenção: Perigo De Choque Elétrico

Para evitar choque elétrico, não retire a tampa. Não contém peças que possam ser consertadas pelo usuário. Este aparelho contém voltagens perigosas e só deve ser aberto por um técnico qualificado e treinado. Para evitar a possibilidade de choque elétrico, desconecte o aparelho da fonte de energia elétrica antes de conectar e desconectar os cabos da LAN.

-  5 **Perigo De Choque Causado Por Raio**



Perigo: Não trabalhe no equipamento ou nos cabos durante períodos suscetíveis a quedas de raio.

Instalação

-  6 **Elétrico - Ajuste Automático De Voltagem**
Este produto ajustar-se-á automaticamente a qualquer voltagem que esteja dentro dos limites indicados no rótulo.
-  7 **Cuidado:** O cabo de alimentação é utilizado como um dispositivo de desconexão. Para deseletrificar o equipamento, desconecte o cabo de alimentação.
-  8 **Elétrico - Equipamentos Do Tipo Classe 1**
Deve ser feita ligação de fio terra para este equipamento. O plugue de alimentação deve ser conectado a uma tomada com adequada ligação de fio terra. Tomadas sem adequada ligação de fio terra podem transmitir voltagens perigosas a peças metálicas expostas.
-  9 **Equipamento de ligação, a tomada eléctrica deve estar instalada perto do equipamento e ser de fácil acesso.**
-  10 **Cuidado:** As aberturas de ventilação não devem ser bloqueadas e devem ter acesso livre ao ar ambiente para arrefecimento adequado do aparelho.
-  11 **Temperatura De Funcionamento:** Este produto foi projetado para uma temperatura ambiente máxima de 40 graus centígrados.
-  12 **Todos Os Países:** Instale o produto de acordo com as normas nacionais e locais para instalações eléctricas.

Estándares: Este producto cumple con los siguientes estándares.

- | | | | |
|--|----------|---------------------|---|
|  | 1 | Emisión RFI | EN55022 Clase B |
|  | 2 | Inmunidad | EN55024 |
|  | 3 | Seguridad eléctrica | EN60950 (TUV), UL60950 (cUL _{us}) |

Seguridad

-  **4**  **Avisos Electricos**
Advertencia: Peligro de electrochoque
 Para evitar un electrochoque, no quite la tapa. No hay ningún componente en el interior al cual puede prestar servicio el usuario. Esta unidad contiene voltajes peligrosos y sólo deberá abrirla un técnico entrenado y calificado. Para evitar la posibilidad de electrochoque desconecte la corriente eléctrica que llega al producto antes de conectar o desconectar los cables LAN.
-  **5**  **Peligro De Rayos**
Peligro: No realice ningún tipo de trabajo o conexión en los equipos o en los cables durante tormentas eléctricas.

Instalación

-  **6**  **Electrico - Auto-ajuste De Tension**
 Este producto se ajustará automáticamente a cualquier tensión entre los valores máximos y mínimos indicados en la etiqueta.
-  **7**  **Atencion:** El cable de alimentación se usa como un dispositivo de desconexión. Para desactivar el equipo, desconecte el cable de alimentación.
-  **8**  **Electrico - Equipo Del Tipo Clase 1**
 Este equipo tiene que tener conexión a tierra. El cable tiene que conectarse a un enchufe a tierra debidamente instalado. Un enchufe que no está correctamente instalado podría ocasionar tensiones peligrosas en las partes metálicas que están expuestas.
-  **9**  **Equipo conectable, el tomacorriente se debe instalar cerca del equipo, en un lugar con acceso fácil".**
-  **10**  **Atencion:** Las aberturas para ventilación no deberán bloquearse y deberán tener acceso libre al aire ambiental de la sala para su enfriamiento.
-  **11**  **Temperatura Requerida Para La Operación:** Este producto está diseñado para una temperatura ambiental máxima de 40 grados C.
-  **12**  **Para Todos Los Países:** Monte el producto de acuerdo con los Códigos Eléctricos locales y nacionales.

Standarder: Denna produkt uppfyller följande standarder.

- | | | |
|-----|---------------|---|
| 🌀 1 | Radiostörning | EN55022 Klass B |
| 🌀 2 | Immunitet | EN55024 |
| 🌀 3 | Elsäkerhet | EN60950 (TUV), UL60950 (cUL _{us}) |

Säkerhet

- 🌀 4  **Tillkännagivanden Beträffande Elektricitetsrisk:**
Risk för elektrisk stöt För att undvika elektrisk stöt, ta ej av locket. Det finns inga delar inuti som behöver underhållas. Denna apparat är under högspänning och får endast öppnas av en utbildad kvalificerad tekniker. För att undvika elektrisk stöt, koppla ifrån produktens strömanslutning innan LAN-kablarna ansluts eller kopplas ur.

- 🌀 5  **Fara För Blixtnedslag**
Fara: Arbeta ej på utrustningen eller kablarna vid åskväder.

Installation

- 🌀 6  Elektriskt - Automatisk Spänningsjustering
Denna produkt justeras automatiskt till alla spänningar inom omfånget som indikeras på produktens märkning.
- 🌀 7  **Warning:** Nätkabeln används som strömbrytare för att koppla från strömmen, dra ur nätkabeln.
- 🌀 8  Elektriskt - Typ Klass 1 Utrustning
Denna utrustning måste vara jordad. Nätkabeln måste vara ansluten till ett ordentligt jordat uttag. Ett felaktigt uttag kan göra att närliggande metalldelar utsätts för högspänning. Apparaten skall anslutas till jordat uttag, när den ansluts till ett nätverk.
- 🌀 9  Utrustning med plugg. Uttaget skall installeras i utrustningens närhet och vara lättåtkomligt.
- 🌀 10  **Warning:** Luftventilerna får ej blockeras och måste ha fri tillgång till omgivande rumsluft för avsalvning.
- 🌀 11  **Driftstemperatur:** Denna produkt är konstruerad för rumstemperatur ej överstigande 40 grader Celsius
- 🌀 12  **Alla länder:** Installera produkten i enlighet med lokala och statliga bestämmelser för elektrisk utrustning.