Allied Telesis

AT-StackXG Stacking Module

Installation Guide

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Overview

The AT-StackXG Stacking Module allows the formation of a stacked configuration when installed in each switch in a group of AT-9400 Basic Layer 3 Gigabit Ethernet Series switches or x600 Layer 3 Gigabit Ethernet Series switches. With its two full-duplex, 12-Gbps stacking ports, the module unifies the individual switches of the stack into a single, logical unit so that the network operations of the devices, such as spanning tree, port mirroring and port trunking, encompass all of the Gigabit Ethernet ports. This can simplify network management and augment network bandwidth.
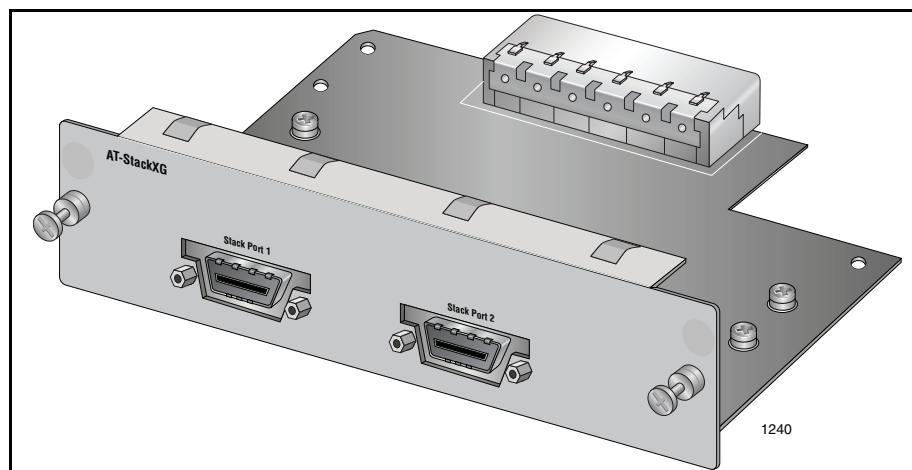

Figure 1. AT-StackXG Stacking Module

Preparation

Review the following information before installing the AT-StackXG Stacking Module:

⚠ **Caution**

The AT-StackXG Stacking Module is sensitive to and can be damaged by electrostatic discharge. Wear a grounding device and observe electrostatic discharge precautions when installing the module in the chassis.

❑ The AT-StackXG Stacking Module is hardware hot-swappable. You can install or replace the module while the switch is powered on.

⚠ **Caution**

If the stacking module is added or replaced in an operating stack, the stack topology may change and cause the stack to reboot and interrupt network traffic.

AT-9400 Basic Layer 3 Gigabit Ethernet Switch Series :

❑ Do not install the module until you have read the latest version of the AT-S63 Software Release Notes and the AT-9400 Series Stack Installation Guide.

❑ The AT-StackXG Stacking Module is supported in the AT-9424Ts, AT-9424Ts/XP, and AT-9448Ts/XP Basic Layer 3 Switches. All other models in the AT-9400 Series do not support the HiGig stacking feature and must be used as stand-alone switches.

❑ Support for the AT-StackXG Stacking Module requires Version 3.0.0 or later of the AT-S63 Management Software.

x600 Layer 3 Switch Gigabit Ethernet Switch Series:

❑ The AT-StackXG Stacking Module is supported in all x600 series products.

❑ Do not install the module until you have read the latest version of the AW+ Software Release Notes and the x600 Series product documentation.

❑ Support for the AT-StackXG Stacking Module requires software version 5.3.1 or later of AlliedWare Plus.

Package Contents

The following items are included in the shipping package. If an item is missing or damaged, contact your Allied Telesis sales representative for assistance.

❑ One AT-StackXG Stacking Module

❑ One AT-StackXG Stacking Cable (length - .5 m)

❑ Installation Guide

Warranty Information

The AT-StackXG Stacking Module has a Lifetime Warranty. Go to **www.alliedtelesis.com/warranty** for the specific terms and conditions of the warranty and for warranty registration.

Installing the AT-StackXG Stacking Module

To install the AT-StackXG Stacking Module, perform the following procedure:

1. Remove the module from the shipping package.

Note
Store the packaging material in a safe location. You must use the original shipping material if you need to return the unit to Allied Telesis.

2. Remove the blank panel from the expansion slot on the back panel of the switch by loosening the two captive screws on the panel with a cross-head screwdriver.
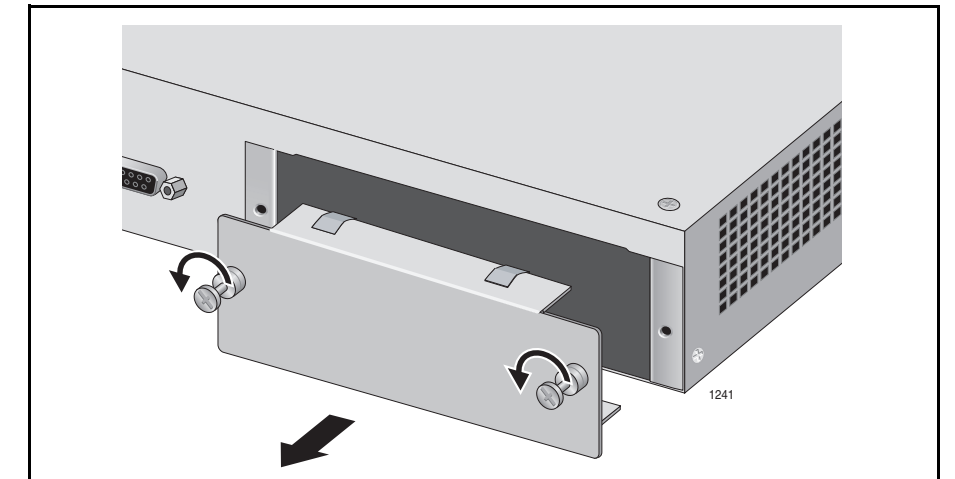

Figure 2. Removing the Blank Panel from the Expansion Slot

Note
Do not remove the blank panel from the chassis until you are ready to install a module. An open slot allows dust to enter the unit and reduces proper airflow and cooling.

3. Align the edges of the module with the guides in the slot and carefully slide the module into the chassis until it is flush with the back panel of the chassis, as shown in Figure 3. Light pressure may be needed to seat the module on the connector on the back panel of the chassis.

⚠ **Caution**

Do not force the module into place. Doing so may damage the connector pins on the backplane inside the chassis. If there is resistance, remove the module and reinsert it after verifying that the edges of the card are properly aligned in the guides in the chassis' module slot.
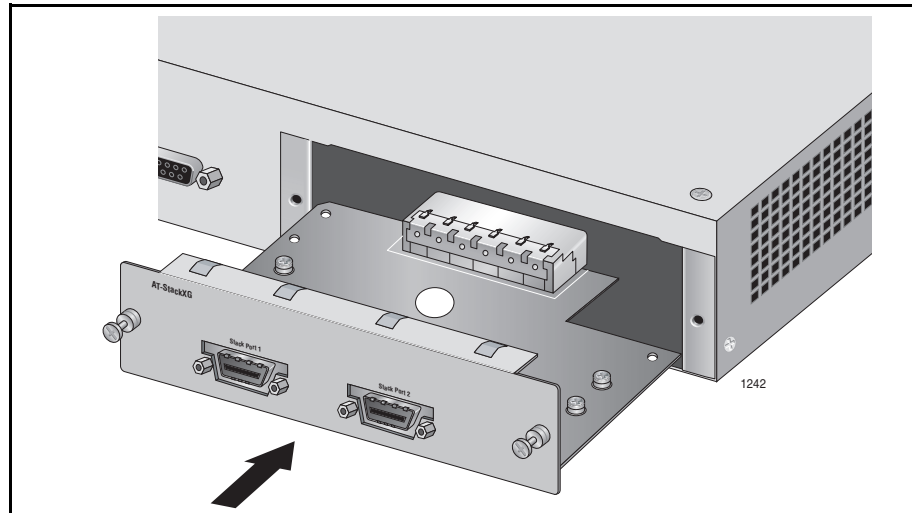
Figure 3. Installing the AT-StackXG Stacking Module

4. Secure the module to the chassis by tightening the two captive screws with a cross-head screwdriver.
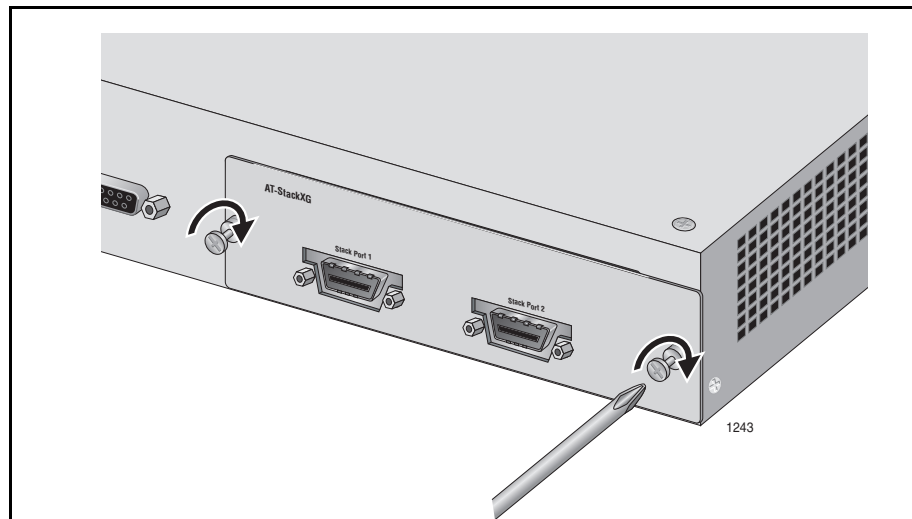

Figure 4. Securing the AT-StackXG Stacking Module

Note
The remaining steps attach the stacking cable to the stacking module. If you are installing the stacking module in an AT-9400 Series Switch, do not cable the module until you have prepared the switch's AT-S63 Management Software, as explained in the *AT-9400 Series Stack Installation Guide*.

Note
If you are installing the stacking module in an x600 Series Switch, do not cable the module until you have prepared the switch's AlliedWare Plus Software on the x600 Series Switches as explained in the *x600 series AlliedWare Plus 5.3.1 Software Reference*.

5. Remove the plastic protector from the connector at one end of the stacking cable.
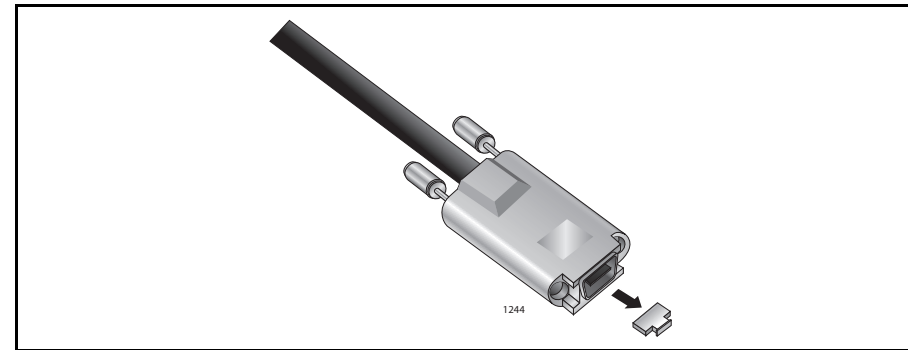

Figure 5. Removing the Plastic Protector

6. Connect the cable to either Stack Port 1 or Stack Port 2 on the stacking module and secure by tightening the two captive thumbscrews.

7. Remove the plastic protector from the connector at the other end of the stacking cable and connect it to a Stack Port on the stacking module in the next switch of the stack. A stacking cable must crossover and connect to a different port on the next stacking module. Stack Port 1 on a module must connect to Stack Port 2 on the next module. Do not connect two Stack Port 1 ports or Stack Port 2 ports together.

AT-StackXG Stacking Module LEDs

The LEDs in the group labelled Stack on the front panel of the switch display the status of the AT-StackXG Stacking Module and the stacking ports. The states of the LEDs are defined in this table.

LED	State	Description
MSTR	Off	The switch is not the master unit of the stack or is not a member of a stack.
	Green	The switch is the master unit of the stack.
1 and 2 L/A	Off	The stacking port has not established a link to another AT-StackXG Stacking Module.
	Steady green	The stacking port has established a link to a stacking port on another AT-StackXG Stacking Module.
	Flashing green	The stacking port is sending or receiving packet traffic.
PRES	Off	The expansion slot on the switch is empty.
	Green	The AT-StackXG Stacking Module is installed in the expansion slot.

Technical Specifications

Dimensions (H x W x D)	3.1 x 14.7 x 8.6 cm (1.2 x 5.8 x 3.4 in.)
Weight	131 g (0.35 lb.)
Operating Temperature:	0° C to 40° C (32° F to 104° F)
Storage Temperature:	-25° C to 70° C (-° 13F to 158° F)
Operating Humidity:	5% to 90% noncondensing
Storage Humidity:	5% to 95% noncondensing
Maximum Operating Altitude:	3,048 m (10,000 ft)
Maximum Nonoperating Altitude:	4,000 m (13,000 ft)

Electrical Safety and Emission Statement

Standards: This product meets the following standards when installed in compliant host equipment.

U.S. Federal Communications Commission

Radiated Energy
Note: This equipment has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with this instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.
Note: Modifications or changes not expressly approved of by the manufacturer or the FCC, can void your right to operate this equipment.

Industry Canada

This Class A digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

European Union Restrictions of the Use of Certain Hazardous Substances (RoHS) in Electrical and Electronic Equipment

This Allied Telesis RoHS-compliant product conforms to the European Union Restriction of the Use of Certain Hazardous Substances (RoHS) in Electrical and Electronic Equipment. Allied Telesis ensures RoHS conformance by requiring supplier Declarations of Conformity, monitoring incoming materials, and maintaining Manufacturing process controls.

RFI Emissions	FCC Class A, EN55022 Class A, EN61000-3-2, EN61000-3-3, VCCI Class A, C-TICK, CE
WARNING: ⚠	In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.
EMC (Immunity)	EN55024
Electrical Safety	EN60950-1 (TUV), UL 60950-1 ($_c$UL$_{US}$)

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