Quick Installation Guide
IE340 Series
Industrial Ethernet Layer 3 Switches

Allied Telesis

Installation Guide

This document contains a short version of the installation instructions for the IE340-12GP, IE340-12GT, IE340-20GP, and IE340L-18GP Industrial Ethernet Layer 3 switches. For complete installation instructions and safety statements, refer to the *IE340 Series Installation Guide* on the Allied Telesis web site at **alliedtelesis.com/us/en/library/search**.

Safety and Electromagnetic Emissions Certificates

For Safety and Electromagnetic Emissions certificates, see the *IE340 Series Installation Guide*.

Informationen zu Sicherheitszertifikaten und Zertifikaten für elektromagnetische Emissionen finden Sie im *IE340 Series Installation Guide*.

Para obtener los certificados de seguridad y emisiones electromagnéticas, consulte la *IE340 Series Installation Guide*.

Pour les certificats relatifs à la sécurité et aux émissions électromagnétiques, consultez le *IE340 Series Installation Guide*.

Per i certificati di sicurezza ed emissioni elettromagnetiche, consultare la *IE340 Series Installation Guide*.

För säkerhets- och elektromagnetiska emissionscertifikat, se *IE340 Series Installation Guide*.

U.S. Federal Communications Commission

This device complies with Part 15 of 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.

VCCI Statements

この装置は、クラスA情報処理装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。VCCI-A

Industrial 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.

Grounding and Bonding Requirements

Electrical systems and communication cabling systems that are required to be grounded must be connected to earth. Grounding and bonding provide reliable means to safely conduct voltages generated by lightning, line surges, or unintentional contact with high voltages lines or equipment to ground.

The users of the plant or those responsible for the installation shall institute the necessary measures (e.g., shielding, bonding, and grounding protection) to assure all components are on the ground fault path. Inappropriate grounding and bonding shall render all warranties null and void.
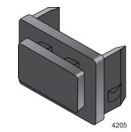
Refer to the *IE340 Series Installation Guide* for recommended practices.
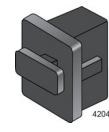
Physical Descriptions

For physical descriptions of the switches, refer to the *IE340 Series Installation Guide*.
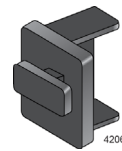
Package Contents

Here are the pre-installed components on the switch:
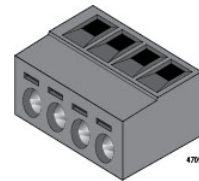

Dust cover on the USB port (See Note)

Dust covers on the twisted pair and Console ports
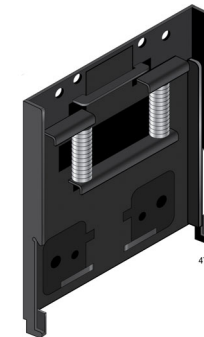
Dust covers on the SFP+ ports

Two 2-pin connectors on the Alarm IN (ALM IN) and Alarm Out (ALM OUT) connectors

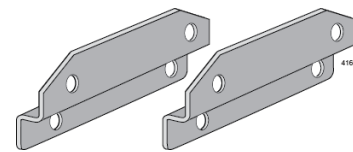One 4-pin connector on the DC power PWR 1 and PWR 2 connectors

One M4x8 Phillips-head grounding screw

One DIN rail bracket on back panel

Note: The IE340L-18GP Switch does not have a USB port.

Here are the items in the accessory kit.

Two wall brackets

Five M4x8 Phillips-head screws (one spare)

One serial Console management cable

Here are the tools and materials you need for the installation:

Ground wire	– One solid ground wire (recommended #16 AWG solid wire) – One heat-shrink tube – Ring-terminal lug
Power wires	– Two or four stranded power wires (recommended 18 AWG stranded wire. Do not use wire heavier than 16 AWG). – One or two 2-wire connectors to connect the power wires to the AC/DC rectifiers or UPS units.
Alarm connectors	– External sensor for the Alarm In (ALM IN) connector and/or external alert device for the Alarm Out (ALM OUT) connector – 24 to 18 AWG stranded wire properly rated for the installation site, maximum length of two meters
DIN rail installation	– 35 x 7.5mm DIN rail – Two DIN rail end clamps (optional)

Concrete wall installation	– Four wall anchors and screws
Tools	– #1 flat-head screwdriver – Phillips-head screwdriver – Wire insulator stripper – Wire crimper tool – Heating device for the heat-shrink tube – Drill with 1/4" carbide drill bit (concrete wall installation)

Installation Options

This quick installation guide explains how to install the switch on a DIN rail or concrete wall.

> **Note**
> The switch's maximum operating temperature depends on its orientation on the wall and the type of enclosure. Allied Telesis recommends installing the device vertically for best possible airflow and cooling. See the following figures.

For instructions on installing the switch on a wooden wall or in an outdoor enclosure, refer to the *IE340 Series Installation Guide*.

> **Note**
> For outdoor environments, the switch must be installed in a UL-listed Type 3X or 4X enclosure to meet safety requirements.

Installing the Switch on DIN Rail

To install the switch on a DIN rail, perform the following procedure:

1. Hold the switch vertically with both hands, with the back panel next to the DIN rail.

2. Hook the bottom flange on the DIN rail into the bottom slot on the DIN rail bracket on the switch.

Bottom slot on DIN rail bracket

Bottom flange on DIN rail
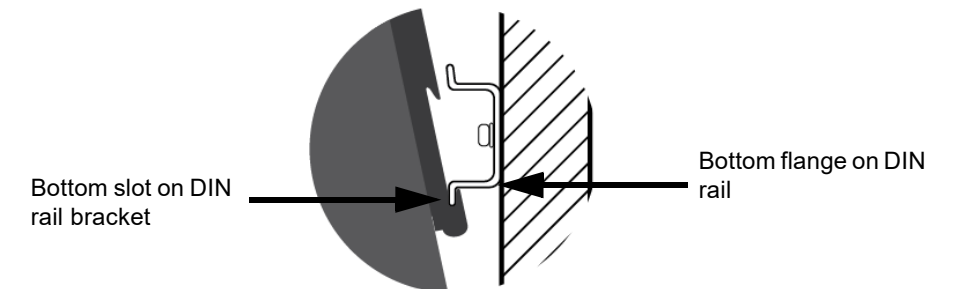
3. Press upwards on the bottom panel of the switch to compress the springs on the DIN rail bracket, and pivot the switch until vertical.
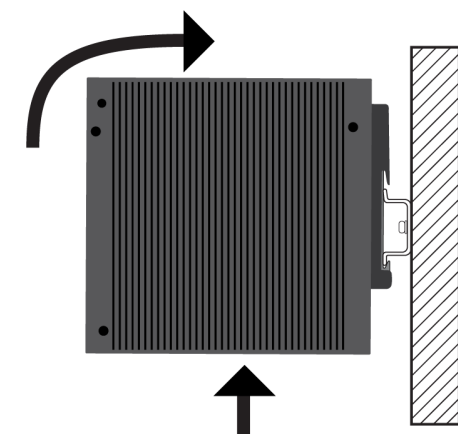
4. Carefully lower the switch so that the top flange on the DIN rail slides into the top slot in the DIN rail bracket.
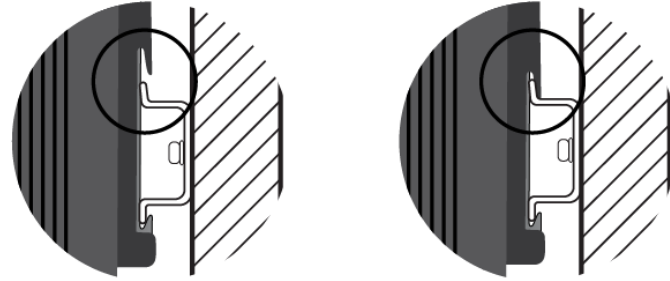
5. Visually inspect the bracket to verify that the DIN rail is now fitted into the top and bottom slots on both the left and right sides.


Top and bottom slots
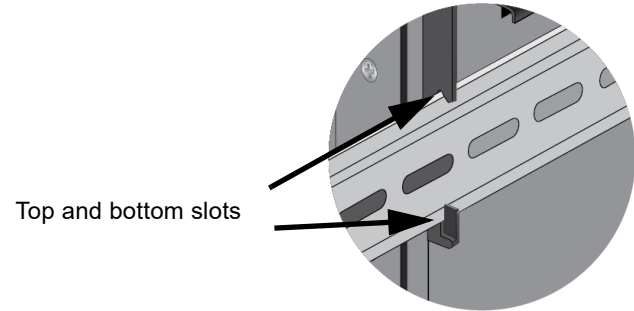
Note
Allied Telesis recommends installing DIN rail end clamps to the sides of the switch to prevent damage or network traffic loss from vibration or shock. End clamps are not available from Allied Telesis.
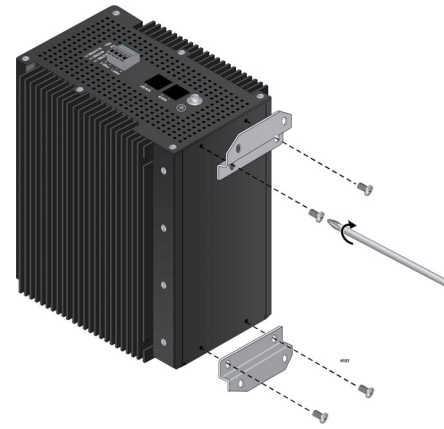
Installing the Switch on a Concrete Wall

To install the switch on a concrete wall, perform the following procedure:

1. Place the switch on a table.

2. Remove the pre-installed DIN rail bracket from the switch using a Phillips-head screwdriver.
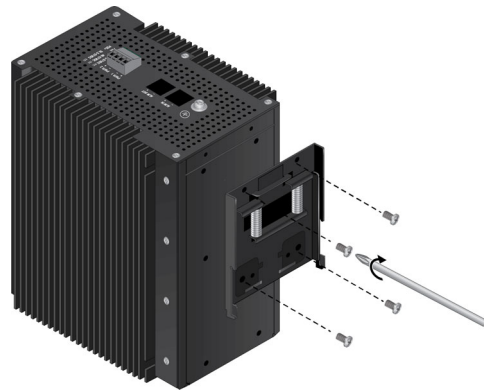
3. Install the two wall brackets to the back panel of the switch, with the four provided screws.

4. Have a person hold the switch on the concrete wall at the selected location for the device while you use a pencil or pen to mark the wall with the locations of the four screw holes in the two wall brackets.
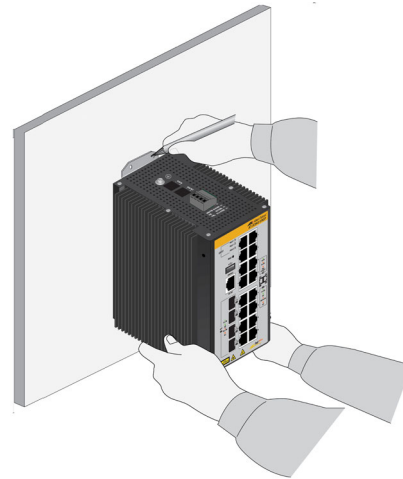
5. Use a drill and 1/4" carbide drill bit to pre-drill the four holes you marked in the previous step. Please review the following guidelines:

❐ Prior to drilling, set the drill to hammer and rotation mode. The mode breaks up the concrete and cleans out the hole.

❐ Allied Telesis recommends cleaning out the holes with a brush or compressed air.

6. Insert four anchors (not provided) into the holes.

7. Have a person hold the switch on the concrete wall at the selected location while you secure it with four screws (not provided).
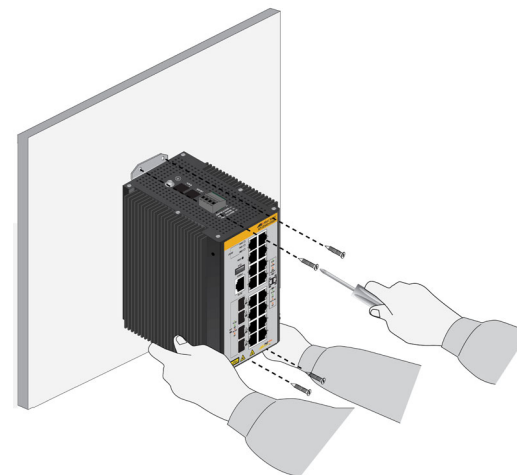
Connecting the Grounding Wire

To connect the grounding wire, perform the following procedure:

1. Strip 2.54cm (1.0 in.) of insulation from the end of the solid grounding wire (recommended #16 AWG) with a wire insulator stripper.
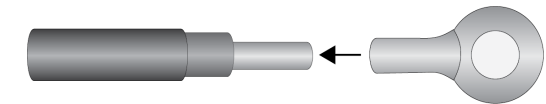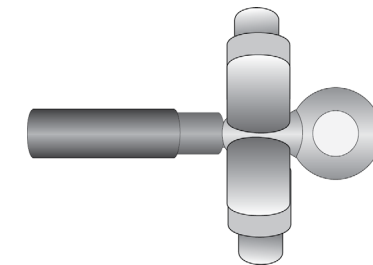
2.54cm (1.0 in.)

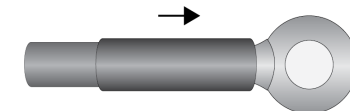2. Slide a heat-shrink tube over the grounding wire.

3. Slide the ring terminal lug over the stripped wire on the grounding wire.
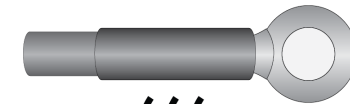

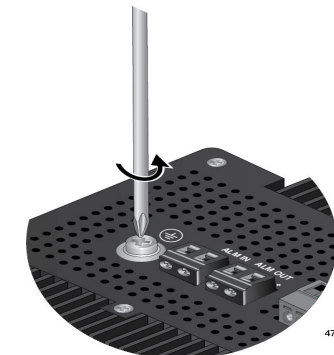4. Crimp the ring terminal lug with a wire crimping tool to secure it on the grounding wire.

5. Slide the heat-shrink tube over the shaft of the ring terminal lug.

6. Heat the heat-shrink tube to secure it on the wire and ring terminal lug.

7. Remove the grounding screw from the switch with a #2 Phillips-head screwdriver.

8. Secure the grounding wire to the IE340 Switch with the grounding screw.

9. Connect the other end of the grounding wire to a ground point at the installation site.

Preparing the DC Power Cables

The switch can be powered by one or two DC power supplies. Two power supplies provide power redundancy.

Each power supply is connected to the switch with two wires, one positive (+) and one negative (-). If you are installing only one power supply to the switch, you may connect it to either the PWR1 or PWR2 connector. For the power requirements, refer to Appendix A, Technical Specifications, in the *IE340 Series Installation Guide*.
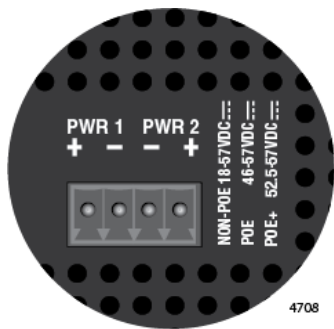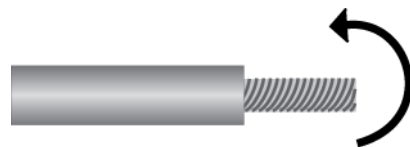

To build DC power cables for the unit, perform the following procedure:

1. Strip 6.5mm (0.25 in.) of insulation from the ends of two strand power wires (recommended 18 AWG) with a wire insulator stripper.
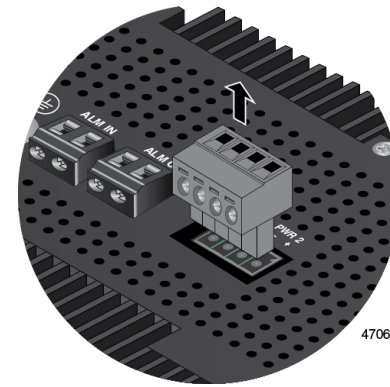
6.5mm (0.25 in.)

2. Tightly wrap the wire strands with your finger tips.

> **Note**
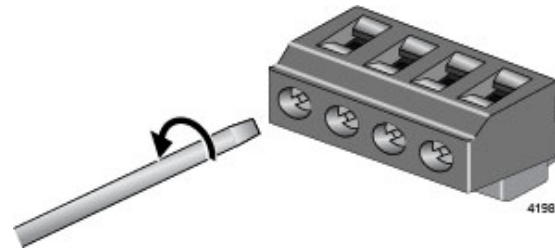> Allied Telesis recommends tinning the wires with solder as added protection against loose strands.
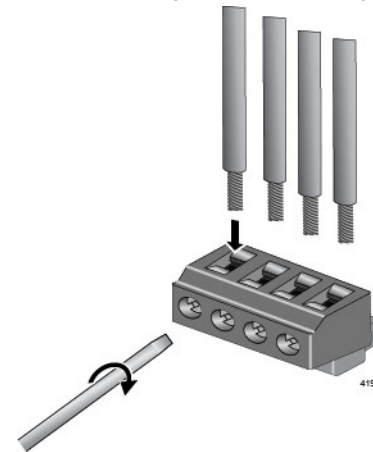
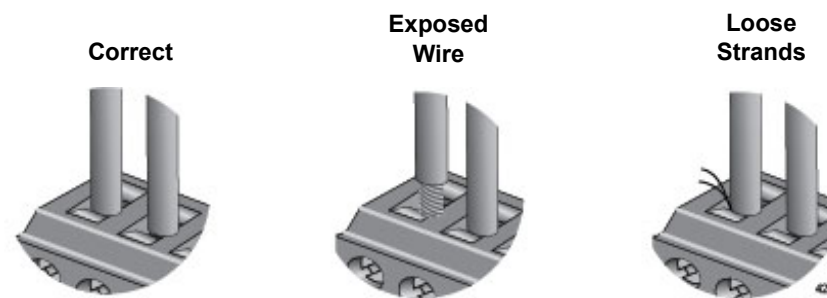3. Remove the PWR 1 - PWR 2 connector from the top panel.

4. Loosen the wire retaining screws in the connector with a #1 screwdriver.

5. Insert the wires into the connector and tighten the retaining screws to secure the wires.

6. After attaching the wires to the connector, verify that there are no exposed wires or loose wire strands.

Correct	Exposed Wire	Loose Strands

Powering on the Switch

1. Verify that the DC power supply is powered off. If there are two DC power supplies, verify that both units are powered off.

2. Connect the DC input plug to the Power connector on the front panel.
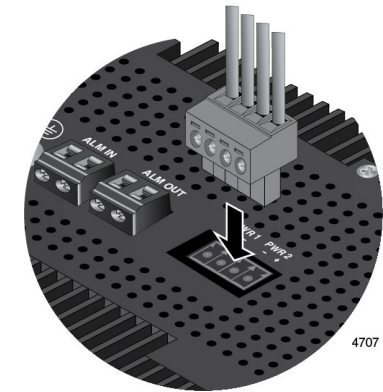
3. Connect the other end of the power cables to the DC power supplies.

4. Power on the DC power supplies.

5. Wait three to four minutes for the switch to start its operating system.

Starting the First Management Session

This section explains how to start a local management session through the Console port on the switch. This procedure requires a terminal, computer, or laptop with an RS-232 serial port or USB port, and terminal emulator, such as PuTTy. It also requires a management cable, as follows:

❒ If your computer has an RS-232 port, you may use the supplied management cable or refer to Appendix A, Technical Specifications, in the *IE340 Series Installation Guide* for cable wiring specifications.

❒ If your computer has a USB port, you may need to purchase a USB-to-Serial converter that is compatible with its operating system. An example is the VT-Kit3 converter from Allied Telesis.

> **Note**
> The first management session with the switch can also be over the Ethernet network through any of the copper or SFP+ ports. The switch has both DHCPv4 and DHCPv6 clients. Their default state is enabled. If the switch does not receive a response from a DHCP server, it uses the default address 169.254.42.42/16.

To start a local management session, perform the following procedure:

1. Connect your computer to the Console port on the switch with a serial cable or the VT-Kit3, (If you are using the VT-Kit3, refer to the *IE340 Series Installation Guide* for instructions.)

2. Configure your terminal emulation program as follows:

❒ Baud rate: 9600 bps (The baud rate of the Console port is adjustable from 1200 to 115200 bps. The default is 9600 bps.)

❒ Data bits: 8

❒ Parity: None

❒ Stop bits: 1

❒ Flow control: None

3. Press Enter. You are prompted for the name and password of the manager account.

4. Enter the user name and password. They are case-sensitive. The default values are:

❒ User name: manager

❒ Password: friend

The switch starts the local management session and displays the following prompt:

```
awplus>
```

This is the prompt for the User Exec mode in the command line interface.

This concludes the Quick Installation instructions. For further instructions, refer to the *IE340 Series Installation Guide*.

This QR code links to the Product Documentation Library on the Allied Telesis web site at **alliedtelesis.com/us/en/library/search**.