

AI NVR Standard 10GbE Kit

Installation Guide

AINVR-STD-10GBE

For

AINVR-STD

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Introduction

Avigilon provides an optional 10GbE Kit for the AI NVR Standard. This kit provides you with a high-speed Ethernet port for faster connections to your security network of ACC Servers and Clients.

Important: An AI NVR Standard with the:

- 10GbE Kit installed is supported on [Release ACC 7.12.4 or later](#).
- 10GbE Kit and the Performance Upgrade Kit installed is supported on [Release ACC 7.14.2 or later](#).

Your organization must upgrade to a release of the ACC software that supports the upgraded AI NVR Standard if it is using an earlier release of the software.

Part Number	Description
AINVR-STD-10GBE	AI NVR Standard 10GbE Kit

Note: If the AI NVR is an operating part of your security system, be aware that it must be shut down to complete this procedure.

Important: If you are installing both the AI NVR Standard 10GbE Kit (AINVR-STD-10GBE) and the AI NVR Performance Upgrade Kit (AINVR-STD-PRK) in the AI NVR, it is recommended that you install the components from both kits as follows:

1. Install CPU and RAM from the AI NVR Performance Kit using the instructions up to the section “2. Removing the Original GPU Card” in the *AI NVR Standard Performance Kit Installation Guide*.
2. Install the second GPU card using the instructions in the section “Installing the 10GbE Card in Slot 3 of Expansion Riser 1” of the *AI NVR Standard 10GbE Kit Installation Guide*, which includes instructions to install the GPU card provided in AI NVR Performance Upgrade Kit.

Confirm Package Contents

Confirm that the kit you are installing contains the following components:

- 1 × 4-port 10GbE Direct Attach SFP+ PCIe card
- 1 × low-profile PCIe bracket (required for the optional installation step of moving the BOSS card to slot 4)

Required Tools

The following tools are not included in the kit package, but are needed to complete the installation:

- Phillips #2 screwdriver

Important: It is recommended that you always use an antistatic mat and antistatic strap while working on components inside the system.

Installing the AI NVR Standard 10GbE Kit

Before starting to install the kit:

1. Turn off the AI NVR, including all attached peripherals. Press the power button on the front panel, and wait for the light to stop blinking to indicate shutdown is complete.



WARNING — Opening or removing the system cover while the system is powered on may expose you to a risk of electric shock.

2. Disconnect the AI NVR from the electrical outlet and disconnect the peripherals.
3. Remove all network, power and peripheral cables from the AI NVR.
4. If applicable, remove the AI NVR from the rack.

Important: Whenever you need to lift the system, get others to assist you. To avoid injury, do not attempt to lift the system by yourself.

5. At the top of the AI NVR, unlock the latch release then lift and rotate the latch towards the back of the unit. The cover slides back and is released from the body.

Tip: Use a Phillips #2 screwdriver to remove the shipping screws before unlatching the cover if you are removing the cover of an AI NVR for the first time.



The procedure used to install the 10 GbE card depends on whether or not you have installed, or plan to install the AI NVR Standard Performance Upgrade Kit (AINVR-STD-PRK) in the AI NVR. Refer to the following table for the correct procedure:

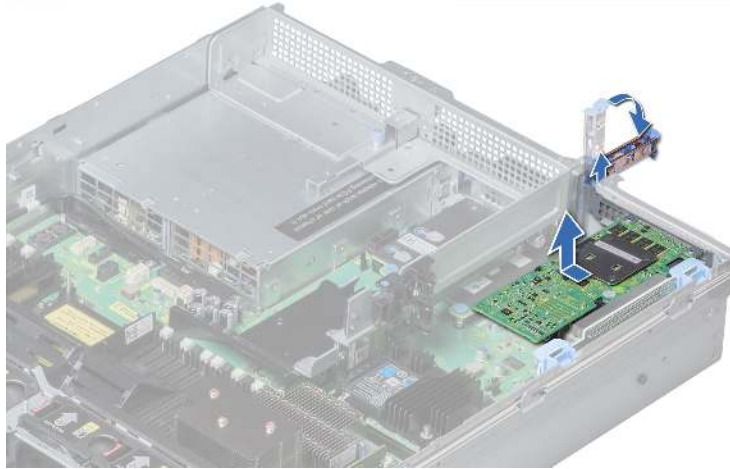
If you have...	Use...
No plans to install the AI NVR Performance Upgrade Kit	<i>Installing the 10GbE Card in Slot 2 of Expansion Riser 1 on the next page</i>
Installed the AI NVR Performance Upgrade Kit	<i>Installing the 10GbE Card in Slot 3 of Expansion Riser 1 on page 10</i>
Plans to install the AI NVR Performance Upgrade Kit	

Installing the 10GbE Card in Slot 2 of Expansion Riser 1

Use this procedure if you have no plans to install the AI NVR Performance Upgrade Kit in the AI NVR.

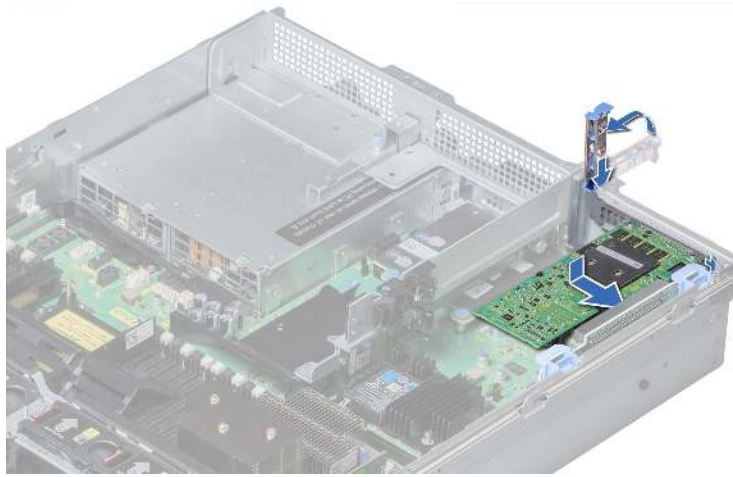
With the AI NVR open:

1. Unpack the 10GbE card.
2. Remove the pre-installed graphics card in slot 1 of expansion riser 1:
 - a. Pull the expansion card latch out of its slot.



Note: The card in this illustration does not match the appearance of the actual card being removed from slot 1.

- b. Hold the expansion card by its edges, and pull the card until the card edge connector disengages from the expansion card connector on the riser.
 - c. Set aside the graphics card you removed on an ESD mat to reinstall later.
 3. Install the 10GbE card in slot 2 and then reinstall the GPU card removed from slot 1 back in slot 1. For each card:
 - a. Slide the card into the slot guide opposite the connector to align the connector on the card with the connector on the riser.
 - b. Insert the card edge connector firmly into the expansion card connector until the card is fully seated.



Note: This illustration shows how a card is installed in slot 1 and then how the expansion card latch is closed. The technique to install the 10GbE card in slot 2 is the same, except it is beneath the card in slot 1 and has to be installed first. The card in this illustration does not match the appearance of the actual card installed in slot 1.

- c. After both cards are installed, push the expansion card latch closed.

Installing the 10GbE Card in Slot 3 of Expansion Riser 1

Use this procedure if the AI NVR Performance Upgrade Kit is installed in the AI NVR, or is planned to be installed.

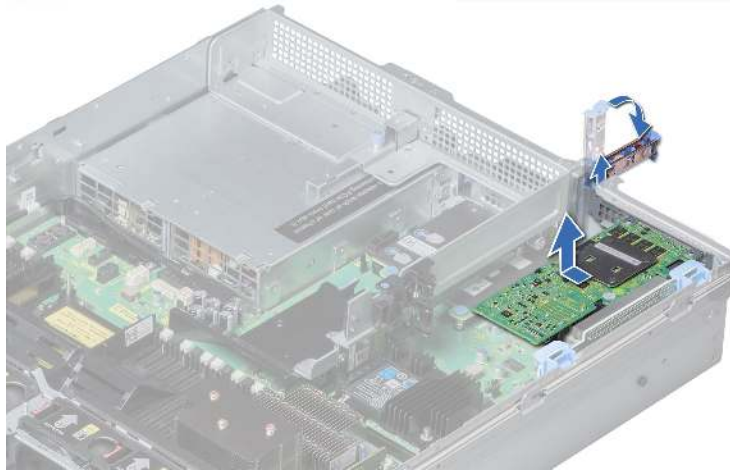
Important: For early AI NVR STD models, the BOSS controller card is installed in riser 1 slot 3 and must be moved to the low-profile slot in riser 2 (slot 4), so that the 10GbE card can be installed in slot 3. If you will be moving the BOSS card, you need the low-profile bracket provided in the kit to complete this procedure. In newer models the BOSS card is preinstalled in the low-profile slot.

In this procedure, all the cards are removed from expansion riser 1 and the removed cards and the 10GbE card are then installed as follows:

Card	Location
BOSS card (with low profile bracket) if removed from slot 3	Slot 4, expansion riser 2
10GbE card	Slot 3, expansion riser 1
2nd GPU (reserved for the AI NVR Standard Performance Kit)	Slot 2, expansion riser 1
Original GPU	Slot 1, expansion riser 1

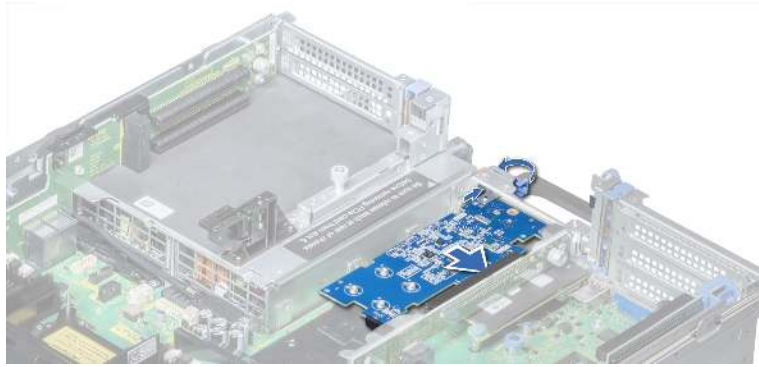
With the AI NVR open:

1. Remove the cards in expansion riser 1:
 - a. Pull the expansion card latch out of its slot.



Note: The card in this illustration does not match the appearance of the actual cards being removed from slot 1.

- b. Hold the expansion card by its edges, and pull the card until the card edge connector disengages from the expansion card connector on the riser.
 - c. Remove the pre-installed graphics card in slot 1 of expansion riser 1.
 - d. If the graphics card from the AI NVR Standard Performance Kit is installed in slot 2, remove it also.
 - e. Set aside the graphics cards you removed on an ESD mat to reinstall later.
 2. If the BOSS card is present in slot 3 of expansion riser 1:
 - a. Remove the BOSS card from the slot.
 - b. Place the BOSS card on an ESD mat, remove the high-profile bracket from the BOSS card, and attach the provided low-profile bracket.
 - c. Pull the expansion card latch on the low-profile slot of riser 2 open.
 - d. Align the connector on the BOSS card with the connector on the riser.

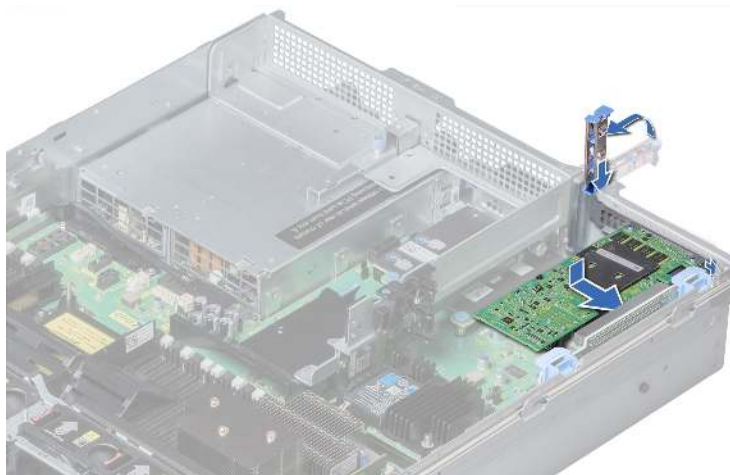


Note: The card in this illustration does not match the appearance of the BOSS card.

- e. Slide the card into the slot guide opposite the connector to align the connector on the card with the connector on the riser.
 - f. Insert the card edge connector firmly into the expansion card connector until the card is fully seated.
 - g. Push the expansion card latch closed.
3. Unpack the 10GbE card.
 4. Install the 10GbE card in the slot 3 of expansion riser 1.
 5. If you removed:
 - Two GPU cards from slots 1 and 2, reinstall them in their original locations.
 - Only one GPU card from slot 1, reinstall it in slot 1.

For each card:

- a. Slide the card into the slot guide opposite the connector to align the connector on the card with the connector on the riser.
- b. Insert the card edge connector firmly into the expansion card connector until the card is fully seated.



Note: This illustration shows how a card is installed in slot 1 and then how the expansion card latch is closed. The technique to install the cards in slots 2 and 3 are the same, except they are beneath the card in slot 1 and have to be installed first. The card in this illustration does not match the appearance of the actual card installed in slot 1.

- c. Push the expansion card latch closed and re-engage the PCIe Lock .

Reattach the AI NVR Cover

When all the components of the kit have been installed:




1. Ensure all expansion card latches are closed and there are filler covers for all empty slots.
2. Close and lock the AI NVR cover.
3. If the AI NVR was rack mounted and removed to install the kit, remount it into the rack.
4. Reconnect all the peripherals and cables.

Important: Ensure that both of the 750W power supplies are connected to mains power. The upgraded requires both power supplies to properly function.

5. Power on the AI NVR.

Confirming the Installation

From an ACC Client running on a workstation with a network connection to the ACC site associated with the AI NVR:

1. Log in to ACC site.
2. Click  in the menu bar and scroll down and click **Site Setup**.
3. In the Search panel, click  to expand the site containing the AI NVR in which the 10GbE card is installed.
4. Navigate to (or search for) the upgraded AI NVR and click .
5. Click **Server Management** to open the Server Management dialog of the AI NVR.
6. Enter the administrator credentials to log in to the Server Management user interface for the AI NVR.
7. In the Server Management user interface:
 - a. On the Server Management Dashboard sidebar, click **Network**. Information for each network connection is listed on a separate tabbed panel.
 - b. Scroll to find the network connection panels for the ports on the new 10GbE card. There should be one panel for each of the four 10GbE Ethernet ports.

Tip: Scroll past the panels for the pre-installed 1GbE ports labeled "Embedded".

8. On the **General** tab:
 - To confirm that the 10GbE ports are available, look under **Controller Info** for:
 - Device—**Ethernet Controller X710 for 10GbE SFP+**
 - Slot—**PCIe Slot 3**
 - To confirm that a SFP+ transceiver is plugged into the port, look under **Transceiver Info** for Type **10G Base-SR**.
9. Log out of the Server Management and close the panel.

Limited Warranty

Avigilon warranty terms for this product are provided at [avigilon.com/warranty](https://www.avigilon.com/warranty).

For More Information

For additional product documentation and software and firmware upgrades, visit support.avigilon.com.

Technical Support

Contact Avigilon Technical Support at support.avigilon.com/s/contactsupport.