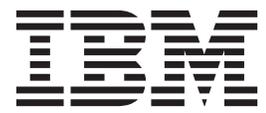


IBM Security QRadar
Version 7.1.0 MR1

Hardware Guide



Note: Before using this information and the product that it supports, read the information in [“Notices and Trademarks”](#) on [page 29](#).

CAUTION: SAFETY INSTRUCTIONS

This section includes safety guidelines to help ensure your own personal safety and protect your system and working environment from potential damage.

Systems are considered to be components in a rack. Thus, the term component refers to any system, various peripherals, or supporting hardware.

Observe the following precautions for rack stability and safety:

- System rack kits are intended to be installed in a rack by trained service technicians. Before working on the rack, make sure that the stabilizers are secured to the rack, extended to the floor, and the full weight of the rack rests on the floor. Install front and side stabilizers on a single rack or front stabilizers for joined multiple racks before working on the rack.



WARNING

Installing systems in a rack without the front and side stabilizers installed could cause the rack to tip over, potentially resulting in bodily injury under certain circumstances. Therefore, always install the stabilizers before installing components in the rack. After installing system/components in a rack, never pull more than one component out of the rack on the slide assemblies at one time. The weight of more than one extended component could cause the rack to tip over and may result in serious injury.

NOTE

Your system is safety-certified as a free-standing unit and as a component for use in a rack cabinet using the customer rack kit. The installation of your system and rack kit in any other rack cabinet has not been approved by any safety agency. It is your responsibility to ensure that the final combination of system and rack complies with all applicable safety standards and local electric code requirements. IBM disclaims all liability and warranties in connection with such combinations.



WARNING

Do not move racks by yourself. Due to the height and weight of the rack, a minimum of two people should accomplish this task.

- Always load the rack from the bottom up and load the heaviest item in the rack first.
- Make sure that the rack is level and stable before extending a component from the rack.
- Use caution when pressing the component rail release latches and sliding a component into or out of a rack; the rails can pinch your fingers.
- Do not overload the AC supply branch circuit that provides power to the rack. The total rack load should not exceed 80 percent of the branch circuit rating.
- Ensure that proper airflow is provided to components in the rack.
- Do not step on or stand on any component when servicing other components in a rack.

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ABOUT THIS GUIDE

The *IBM Security QRadar Hardware Installation Guide* provides information on QRadar SIEM, QRadar SIEM, and QRadar Network Anomaly Detection appliances. For information on rack mounting your appliances, refer to the documentation that shipped with your appliance.

Intended Audience The *IBM Security QRadar Hardware Installation Guide* is intended for operations, data center, or system administration personnel.

Conventions The following conventions are used throughout this guide:

- ▶ Indicates that the procedure contains a single instruction.

NOTE Indicates that the information provided is supplemental to the associated feature or instruction.



CAUTION

Indicates that the information is critical. A caution alerts you to potential loss of data or potential damage to an application, system, device, or network.



WARNING

Indicates that the information is critical. A warning alerts you to potential dangers, threats, or potential personal injury. Read any and all warnings carefully before proceeding.

Technical Documentation

For information on how to access more technical documentation, technical notes, and release notes, see the [Accessing IBM Security QRadar SIEM Documentation Technical Note](#).
(<http://www.ibm.com/support/docview.wss?rs=0&uid=swg21614644>)

**Contacting
Customer Support**

For information on contacting customer support, see the *[Support and Download Technical Note](#)*.
(<http://www.ibm.com/support/docview.wss?rs=0&uid=swg21612861>)

1

APPLIANCES OVERVIEW

This section provides an overview of QRadar SIEM, QRadar Log Manager, and QRadar Network Anomaly Detection appliances, including capabilities, and license limitations.

This section includes the following topics:

- [QFlow 1201](#)
- [QFlow 1202](#)
- [QFlow 1301](#)
- [QFlow 1310](#)
- [QRadar 1501](#)
- [QRadar 1605](#)
- [QRadar 1624](#)
- [QRadar 1705](#)
- [QRadar 1724](#)
- [QRadar 1805](#)
- [QRadar 2100](#)
- [QRadar 3105 \(Base\)](#)
- [QRadar 3105 \(Console\)](#)
- [QRadar 3124 \(Base\)](#)
- [QRadar 3124 \(Console\)](#)
- [QRadar Log Manager 1605](#)
- [QRadar Log Manager 1624](#)
- [QRadar Log Manager 2100](#)
- [QRadar Log Manager 3105 \(Base\)](#)
- [QRadar Log Manager 3105 \(Console\)](#)
- [QRadar Log Manager 3124 \(Base\)](#)
- [QRadar Log Manager 3124 \(Console\)](#)
- [QRadar Network Anomaly Detection 3105](#)

QFlow 1201

The QFlow 1201 appliance is a QRadar QFlow Collector appliance that provides high capacity and scalable Layer 7 application data collection for distributed deployments. The QFlow 1201 also supports external flow-based data sources.

The QFlow 1201 supports:

- 200 Mbps of network traffic
- Six 10/100/1000 Base-T network monitoring interfaces
- One management interface

For diagrams and information on the front and back panel of this appliance, see [QRadar 2100](#), [QRadar 1501](#), and [all QFlow Appliances](#).

QFlow 1202

The QFlow 1202 appliance is a QRadar QFlow Collector appliance that provides high capacity and scalable Layer 7 application data collection for distributed deployments. The QFlow 1202 also supports external flow-based data sources.

The QFlow 1202 supports:

- 2 Gbps of network traffic
- Napatech Network Adapter, providing four 1 Gbps 10/100/1000 Base-T network interfaces
- One management interface

For diagrams and information on the front and back panel of this appliance, see [QRadar 2100](#), [QRadar 1501](#), and [all QFlow Appliances](#).

QFlow 1301

The QFlow 1301 appliance is a QRadar QFlow Collector appliance that provides high capacity and scalable Layer 7 application data collection for distributed deployments. The QFlow 1301 also supports external flow-based data sources.

The QFlow 1301 supports:

- 2 Gbps of network traffic
- Napatech Network Adapter, providing four 1 Gbps 1000 Base SX Multi-Mode Fiber network monitoring interfaces
- One management interface

For diagrams and information on the front and back panel of this appliance, see [QRadar 2100](#), [QRadar 1501](#), and [all QFlow Appliances](#).

QFlow 1310

The QFlow 1310 appliance is a QRadar QFlow Collector appliance that provides high capacity and scalable Layer 7 application data collection for distributed deployments. The QFlow 1310 also supports external flow-based data sources.

The QFlow 1310 supports:

- 2 Gbps of network traffic
- One management interface
- Napatech Network Adapter, providing two 10 Gbps XFP network monitoring interfaces

For diagrams and information on the front and back panel of this appliance, see [QRadar 2100, QRadars 1501, and all QFlow Appliances](#).

QRadar 1501

The QRadars 1501 appliance is a dedicated Event Collector. By default, a dedicated Event Collector collects and parses event from various log sources and continuously forwards these events to an Event Processor. You can configure the Event Collector to temporarily store events and only forward the stored events on a schedule. A dedicated Event Collector does not process events and it does not include an on-board Event Processor.

The QRadars 1501 appliance supports:

- 2,500 Events Per Second (EPS), controlled by the license of the associated Event Processor
- 750 log sources
- 1.3 TB dedicated storage
- Five 10/100/1000 Base-T network monitoring interfaces
- One 10/100/1000 Base-T management interface

For diagrams and information on the front and back panel of this appliance, see [QRadar 2100, QRadars 1501, and all QFlow Appliances](#).

QRadar 1605

The QRadars 1605 appliance is a dedicated Event Processor that allows you to scale your QRadars deployment to manage higher Event Per Second (EPS) rates. The QRadars 1605 appliance includes an on-board Event Collector, Event Processor, and internal storage for events.

The QRadars 1605 is a distributed Event Processor appliance and requires a connection to a QRadars 3105 or QRadars 3124 appliance.

The QRadars 1605 appliance supports:

- Up to 20,000 events per second, depending on license
- 6.5 TB or larger dedicated event storage
- Three 10/100/1000 Base-T network monitoring interfaces
- One 10/100/1000 Base-T management interface

For diagrams and information on the front and back panel of this appliance, see [QRadar Appliances](#).

QRadar 1624

The QRadar 1624 appliance is a dedicated Event Processor that allows you to scale your QRadar deployment to manage higher Event Per Second (EPS) rates. The QRadar 1624 appliance includes an on-board Event Collector, Event Processor, and internal storage for events. The QRadar 1605 and 1624 appliances are similar appliances, however, the QRadar 1624 appliance provides more storage and better performance.

The QRadar 1624 is a distributed Event Processor appliance and requires a connection to a QRadar 3124 Console appliance.

The QRadar 1624 appliance supports:

- Up to 20,000 events per second, depending on license
- 16 TB or larger dedicated event storage
- One 10/100/1000 Base-T network monitoring interface
- One 10/100/1000 Base-T management interface

For diagrams and information on the front and back panel of this appliance, see [QRadar Appliances](#).

QRadar 1705

The QRadar 1705 appliance is a Flow Processor that you can deploy in conjunction with the QRadar 3105 appliance to increase storage. The QRadar 1705 includes an on-board Event Processor, and internal storage.

The QRadar 1705 appliance supports:

- 600,000 Flows Per Minute (FPM), depending on traffic types
- 6.5 TB or larger dedicated flow storage
- 1,000 network objects
- Three 10/100/1000 Base-T network monitoring interfaces
- One 10/100/1000 Base-T management interface

For diagrams and information on the front and back panel of this appliance, see [QRadar Appliances](#).

QRadar 1724

The QRadar 1724 appliance is a Flow Processor that you can deploy in conjunction with the QRadar 3124 appliance to increase storage. The QRadar 1724 includes an on-board Event Processor, and internal storage. The QRadar 1705 and 1724 appliances are similar appliances, however, the QRadar 1724 appliance provides more storage and better performance.

The QRadars 1724 appliance supports:

- 1,200,000 Flows Per Minute (FPM), depending on traffic types
- 16 TB or larger dedicated flow storage
- 1,000 network objects
- One 10/100/1000 Base-T network monitoring interface
- One 10/100/1000 Base-T management interface

For diagrams and information on the front and back panel of this appliance, see [QRadar Appliances](#).

QRadar 1805

The QRadars 1805 appliance is a combine Event Processor and Flow Processor that allows you to scale your QRadars deployment to manage additional event and flows. The QRadars 1805 includes an on-board Event Processor, and internal storage.

The QRadars 1805 appliance supports:

- Up to 200,000 Flows Per Minute (FPM), depending on license
- Up to 5,000 Events Per Second (EPS), depending on license
- 750 log sources
- 6.5 TB dedicated storage
- Three 10/100/1000 Base-T network monitoring interfaces
- One 10/100/1000 Base-T management interface

For diagrams and information on the front and back panel of this appliance, see [QRadar Appliances](#).

QRadar 2100

The QRadars 2100 appliance is an all-in-one system that combines Network Behavioral Anomaly Detection (NBAD) and Security Information and Event Management (SIEM) to accurately identify and appropriately prioritize threats occurring on your network.

The QRadars 2100 appliance supports:

- 100 network objects
- Up to 50,000 Flows Per Minute (FPM), depending on license
- 1,000 Events Per Second (EPS)
- 750 log sources
- 1.3 TB dedicated storage
- External flow collection

- Five 10/100/1000 Base-T network monitoring interfaces
- One 10/100/1000 Base-T management interface

NOTE

Additional QRadar QFlow Collectors are sold separately.

For diagrams and information on the front and back panel of this appliance, see [QRadar 2100, QRadar 1501, and all QFlow Appliances](#).

QRadar 3105 (Base)

The QRadar 3105 (Base) appliance is an all-in-one QRadar system that can profile network behavior and identify network security threats. The QRadar 3105 includes:

- Event Collector
- Event Processor for processing events and flows
- Internal storage for events and flows

The QRadar 3105 appliance supports:

- Up to 1000 network objects, depending on license
- Up to 200,000 Flows Per Minute (FPM), depending on license
- Up to 5,000 Events Per Second (EPS), depending on license
- 750 log sources (additional devices can be added with licensing option)
- 6.5 TB dedicated storage
- Three 10/100/1000 Base-T network monitoring interfaces
- One 10/100/1000 Base-T management interface
- Requires external QRadar QFlow Collectors for layer 7 network activity monitoring

For diagrams and information on the front and back panel of this appliance, see [QRadar Appliances](#).

QRadar 3105 (Console)

You can expand the capacity of the QRadar 3105 (Base) beyond license-based upgrade options by upgrading to the QRadar 3105 (Console) appliance and adding one or more of the following appliances:

- [QRadar 1605](#)
- [QRadar 1624](#)
- [QRadar 1705](#)
- [QRadar 1724](#)
- [QRadar 1805](#)

The QRadar 3105 (Console) appliance allows you to manage a distributed deployment of Event Processors and Flow Processors to profile network behavior and identify network security threats.

For diagrams and information on the front and back panel of this appliance, see [QRadar Appliances](#).

QRadar 3124 (Base) The QRadar 3124 (Base) appliance is an all-in-one QRadar system that can profile network behavior and identify network security threats. The QRadar 3124 (Base) appliance includes the following components:

- Event Collector
- Event Processor for processing events and flows
- Internal storage for events and flows

The QRadar 3105 (Base) and 3124 (Base) appliances are similar appliances, however, the QRadar 3124 (Base) appliance provides more storage and better performance.

The QRadar 3124 (Base) appliance supports:

- Up to 1,000 network objects, depending on license
- Up to 200,000 Flows Per Minute (FPM), depending on license
- 5,000 Events Per Second (EPS), depending on license
- 750 log sources (additional devices can be added with licensing option)
- 16 TB dedicated storage
- One 10/100/1000 Base-T network monitoring interface
- One 10/100/1000 Base-T management interface
- Requires external QRadar QFlow Collectors for layer 7 network activity monitoring

For diagrams and information on the front and back panel of this appliance, see [QRadar Appliances](#).

QRadar 3124 (Console)

You can expand the capacity of the QRadar 3124 (Base) appliance beyond license-based upgrade options by upgrading to the QRadar 3124 (Console) appliance and adding one or more of the following appliances:

- [QRadar 1605](#)
- [QRadar 1624](#)
- [QRadar 1705](#)
- [QRadar 1724](#)
- [QRadar 1805](#)

The QRadar 3124 (Console) appliance allows you to manage a distributed deployment of Event Processors and Flow Processors to profile network behavior and identify network security threats.

The QRadar 3105 (Console) and 3124 (Console) appliances are similar appliances, however, the QRadar 3124 (Console) appliance provides more storage and better performance.

For diagrams and information on the front and back panel of this appliance, see [QRadar Appliances](#).

QRadar Log Manager 1605

The QRadar Log Manager 1605 appliance is a dedicated Event Processor that allows you to scale your QRadar deployment to manage higher Event Per Second (EPS) rates. The QRadar 1605 appliance includes an on-board Event Collector, Event Processor, and internal storage for events.

The QRadar 1605 is a distributed Event Processor appliance and requires a connection to a QRadar Log Manager 3105 appliance.

The QRadar 1605 appliance supports:

- Up to 20,000 events per second, depending on license
- 6.5 TB or larger dedicated event storage
- Three 10/100/1000 Base-T network monitoring interfaces
- One 10/100/1000 Base-T management interface

For diagrams and information on the front and back panel of this appliance, see [QRadar Appliances](#).

QRadar Log Manager 1624

The QRadar Log Manager 1624 appliance is a dedicated Event Processor that allows you to scale your QRadar Log Manager deployment to manage higher Event Per Second (EPS) rates. The QRadar Log Manager 1624 appliance includes an on-board Event Collector, Event Processor, and internal storage for events.

The QRadar Log Manager 1624 is a distributed Event Processor appliance and requires a connection to a QRadar Log Manager 3124 appliance.

The QRadar Log Manager 1624 appliance supports:

- Up to 20,000 events per second, depending on license
- 16 TB or larger dedicated event storage
- One 10/100/1000 Base-T network monitoring interface
- One 10/100/1000 Base-T management interface

For diagrams and information on the front and back panel of this appliance, see [QRadar Appliances](#).

QRadar Log Manager 2100

The QRadar Log Manager 2100 appliance is an all-in-one system that provides Security Information and Event Management (SIEM) to accurately identify and appropriately prioritize threats occurring on your network.

The QRadar Log Manager 2100 appliance supports:

- Up to 1,000 Events Per Second (EPS), depending on license
- 750 log sources
- Five 10/100/1000 Base-T network monitoring interfaces
- One 10/100/1000 Base-T management interface

For diagrams and information on the front and back panel of this appliance, see [QRadar 2100, QRadar 1501, and all QFlow Appliances](#).

QRadar Log Manager 3105 (Base)

The QRadar Log Manager 3105 (Base) appliance is an all-in-one system that allows you to manage and store events from various network devices. The QRadar Log Manager 3105 (Base) appliance includes the following components:

- Event Collector
- Event Processor
- Internal storage for events

The QRadar Log Manager 3105 (Base) appliance supports:

- Up to 5,000 Events Per Second (EPS), depending on license
- 750 log sources (additional log sources can be added with licensing option)
- Three 10/100/1000 Base-T network monitoring interfaces
- One 10/100/1000 Base-T management interface

NOTE

You can upgrade your license to migrate your QRadar Log Manager 3105(Base) to QRadar 3105 (Base). For more information on migrating QRadar Log Manager to QRadar SIEM, see the *Migrating QRadar Log Manager to QRadar SIEM Technical Note*.

For diagrams and information on the front and back panel of this appliance, see [QRadar Appliances](#).

QRadar Log Manager 3105 (Console)

You can expand the capacity of the QRadar Log Manager 3124 (Base) appliance beyond license-based upgrade options by upgrading to the QRadar Log Manager 3124 (Console) appliance and adding one or more of the following appliances:

- [QRadar Log Manager 1605](#)
- [QRadar Log Manager 1624](#)

The QRadar Log Manager 3105 (Console) appliance allows you to manage a distributed deployment of Event Processors to collect and process events.

NOTE

You can upgrade your license to migrate your QRadar Log Manager 3105 to QRadar 3105. For more information on migrating QRadar Log Manager to QRadar SIEM, see the *Migrating QRadar Log Manager to QRadar SIEM Technical Note*.

For diagrams and information on the front and back panel of this appliance, see [QRadar Appliances](#).

QRadar Log Manager 3124 (Base)

The QRadar Log Manager 3124 (Base) appliance is an all-in-one system that allows you to manage and store events from various network devices. The QRadar Log Manager (Base) appliance includes the following components:

- Event Collector
- Event Processor
- Internal storage for events

The QRadar Log Manager 3124 (Base) appliance supports:

- Up to 5,000 Events Per Second (EPS), depending on license
- 750 log sources (additional devices can be added with licensing option)
- One 10/100/1000 Base-T network monitoring interface
- One 10/100/1000 Base-T management interface

NOTE

You can upgrade your license to migrate your QRadar Log Manager 3124 (Base) appliance to QRadar 3124 (Base). For more information on migrating QRadar Log Manager to QRadar SIEM, see the *Migrating QRadar Log Manager to QRadar SIEM Technical Note*.

The QRadar Log Manager 3105 (Base) and 3124 (Base) appliances are similar appliances, however, the QRadar Log Manager 3124 (Base) appliance provides more storage and better performance.

For diagrams and information on the front and back panel of this appliance, see [QRadar Appliances](#).

QRadar Log Manager 3124 (Console)

You can expand the capacity of the QRadar Log Manager 3124 (Base) appliance beyond license-based upgrade options by upgrading to the QRadar Log Manager 3124 (Console) appliance and adding one or more of the following appliances:

- [QRadar Log Manager 1605](#)
- [QRadar Log Manager 1624](#)

NOTE

You can upgrade your license to migrate your QRadar Log Manager 3124 (Console) appliance to QRadar 3124 (Console). For more information on migrating QRadar Log Manager to QRadar SIEM, see the *Migrating QRadar Log Manager to QRadar SIEM Technical Note*.

The QRadar Log Manager 3124 (Console) appliance allows you to manage a distributed deployment of Event Processors to collect and process events.

The QRadar Log Manager 3105 (Base) and 3124 (Base) appliances are similar appliances, however, the QRadar Log Manager 3124 (Base) appliance provides more storage and better performance.

For diagrams and information on the front and back panel of this appliance, see [QRadar Appliances](#).

QRadar Network Anomaly Detection 3105

The QRadar Network Anomaly Detection 3105 appliance is a QRadar system that integrates with IBM ISS SiteProtector products to provide greater insight to network behaviors and abnormal activities using real-time correlation and behavior analytics.

The QRadar Network Anomaly Detection 3105 appliance supports:

- Up to 200,000 Flows per Minute (FPM), depending on your license
- Up to 1,000 Events Per Second (EPS), depending on your license
- 750 log sources
- 6.5 TB dedicated storage
- Three 10/100/1000 Base-T network monitoring interfaces
- One 10/100/1000 Base-T management interface

For diagrams and information on the front and back panel of this appliance, see [QRadar Appliances](#).

2

APPLIANCE DIAGRAMS

This section includes diagrams and descriptions for the back and front panels of your appliance. The diagrams in this guide are representations of a QRadar appliance. Your system may vary, depending on the version of appliance you have purchased.

This section includes the following topics:

- [Integrated Management Module](#)
- [QRadar 2100, QRadar 1501, and all QFlow Appliances](#)
- [QRadar Appliances](#)

Integrated Management Module

On the back panel of each appliance type, the serial connector and ethernet connectors can be managed using the Integrated Management Module (IMM). You can configure the IMM to share an ethernet port with the QRadar management interface; however, we recommend configuring the IMM in dedicated mode to reduce the risk of losing the IMM connection when the appliance is restarted. To configure the IMM, you must access the System BIOS settings by pressing the F1 key when the IBM splash screen is displayed. For further instructions on how to configure the IMM, see the *Integrated Management Module User's Guide* located on the CD that was shipped with your appliance.

QRadar 2100, QRadar 1501, and all QFlow Appliances

This section provides information on the front and back panel features for the following appliances:

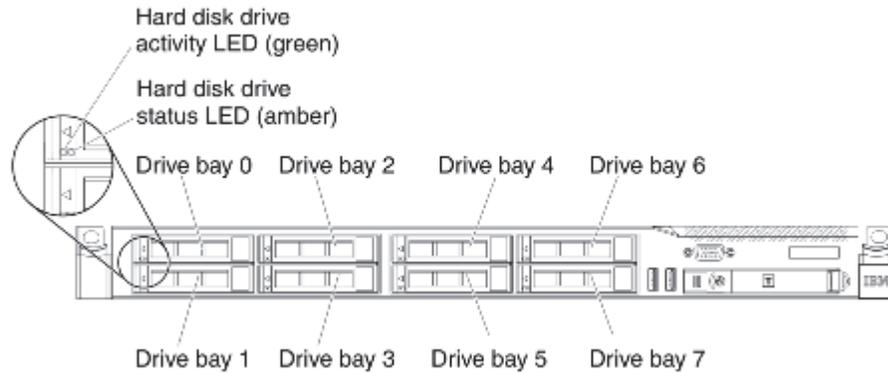
- [QRadar 2100](#)
- [QFlow 1201](#)
- [QFlow 1202](#)
- [QFlow 1301](#)
- [QFlow 1310](#)
- [QRadar 1501](#)
- [QRadar Log Manager 2100](#)

This section includes the following topics:

- **Front Panel Indicators and Features**
- **Back Panel Indicators and Features**

Front Panel Indicators and Features

The following figure shows the front panel indicators and features of the of QRadar 2100 and all QFlow appliances.



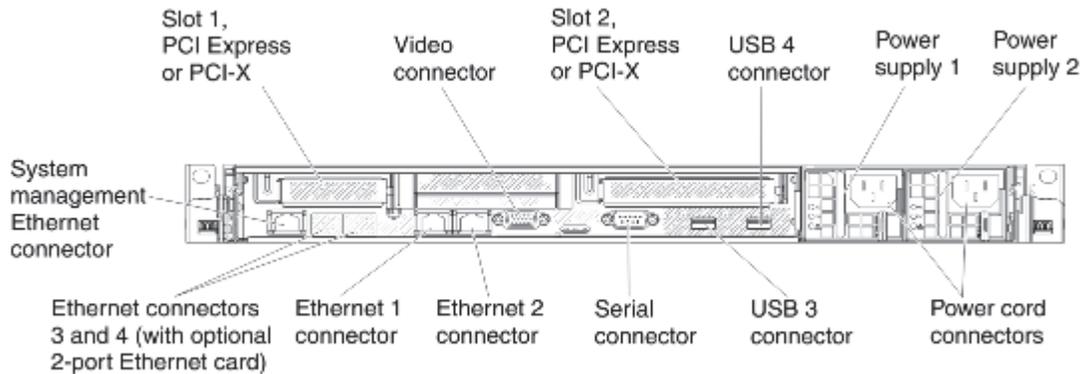
The following table describes the front panel features.

Table 2-1 Front Panel Features of QRadar 2100 and all QFlow Appliances

Features	Description
Hard Disk Drive Activity LED	Indicates when the hard drive is active. This light is green. When this LED is flashing, the hard drive is in use.
Hard Disk Drive Status LEDs	Indicates the status of the drive. This light is amber, and indicates the following statuses: <ul style="list-style-type: none"> • Lit - The hard disk drive has failed. • Flashing slowly - When this LED flashes once per second, the hard disk drive is being rebuilt. • Flashing rapidly - When this LED flashes three times per second, the controller is identifying the hard disk drive.
Drive Bays	Hard drive bays are numbered 0 through 7 starting at the upper left drive bay.

Back Panel Indicators and Features

The following figure shows the back panel features of the QRadar 2100 and all QFlow Appliances.



The following table describes the back panel features.

Table 2-2 Back Panel Features of QRadar 2100 and All QFlow Appliances

Features	Description
Slot 1, PCI Express or PCI-X	Insert a low-profile PCI Express or PCI-X adapter into this slot. You can purchase an optional PCI Express or PCI-X riser card assembly with bracket if you want to install a PCI adapter in this slot.
video connector	Connect a VGA monitor to this connector. The video connectors on the front and rear of the server can be used simultaneously.
Slot 2, PCI Express or PCI-X	Insert a half-length, full-height PCI Express or PCI-X adapter into this slot. Standard models of the server come with one PIC Express riser-card assembly installed in this slot. You can purchase an optional PCI-X riser-card assemble with bracket if you want to install a PCI-X adapter in this slot. If your appliance is shipped with an uninstalled Napatech Network Adapter, you can install the adapter in Slot 2. For more information on how to install a Napatech Network Adapter, see the <i>Installing a Napatech Network Adapter Technical Note</i> .
USB Connectors	Connect a USB device, such as a USB mouse and keyboard to any of these connectors. Two additional USB connectors are available on the front panel.
Power Supplies	Supports two power supplies.

Table 2-2 Back Panel Features of QRadar 2100 and All QFlow Appliances (continued)

Features	Description
Power Cord Connectors	Connect the power cord to this connector. <i>Note: Power supply 1 is the default/primary power supply. If power supply 1 fails, you must replace it immediately.</i>
serial connector	Connect a 9-pin serial device to this connector. The serial port is shared with the integrated management module (IMM). The IMM can take control of the shared serial port to perform text console redirection and to redirect serial traffic, using Serial over LAN (SOL).
Ethernet Connectors	Use either of these connectors to connect the server to a network. When you use the Ethernet 1 connector, the network can be shared with the IMM through a single network cable.
System Management Ethernet Connector	Allow you to connect your management interface.

QRadar Appliances

This section provides information on the front and back panel features for the following appliances:

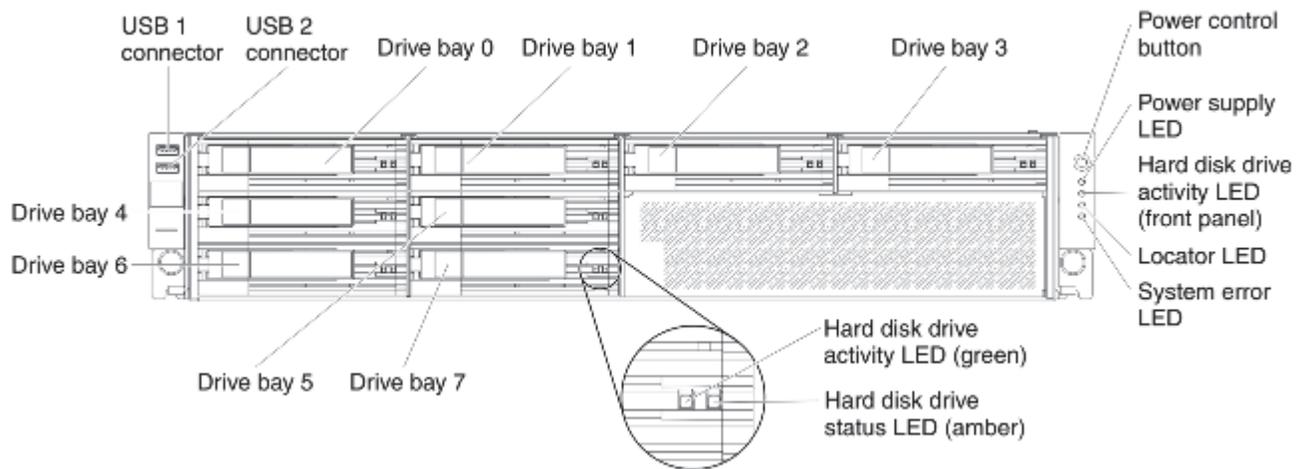
- **QRadar 1605**
- **QRadar 1624**
- **QRadar 1705**
- **QRadar 1724**
- **QRadar 1805**
- **QRadar 3105 (Base)**
- **QRadar 3105 (Console)**
- **QRadar 3124 (Base)**
- **QRadar 3124 (Console)**
- **QRadar Log Manager 1605**
- **QRadar Log Manager 1624**
- **QRadar Log Manager 3105 (Base)**
- **QRadar Log Manager 3105 (Console)**
- **QRadar Log Manager 3124 (Base)**
- **QRadar Log Manager 3124 (Console)**
- **QRadar Network Anomaly Detection 3105**

This section includes the following topics:

- [Front Panel Indicators and Features](#)
- [Back Panel Indicators and Features](#)

Front Panel Indicators and Features

The following figure shows the front panel indicators and features of QRadar and all QRadar Log Manager appliances.



The following table describes the front panel features.

Table 2-3 Front Panel Features QRadar and QRadar Log Manager Appliances

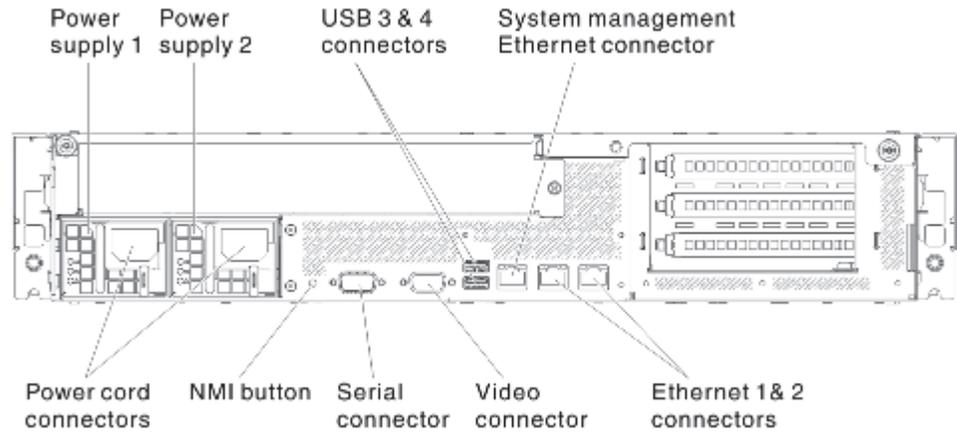
Features	Description
Hard Disk Drive Activity LED	Indicates when the hard drive is active. This light is green. When this LED is flashing, the hard drive is in use.
Hard Disk Drive Status LEDs	Indicates the status of the drive. This light is amber, and indicates the following statuses: <ul style="list-style-type: none"> • Lit - The hard disk drive has failed. • Flashing slowly - When this LED flashes once per second, the hard disk drive is being rebuilt. • Flashing rapidly - When this LED flashes three times per second, the controller is identifying the hard disk drive.
Drive Bays	Hard drive bays are numbered 0 through 7 starting at the upper left drive bay.
USB Connectors	Connect a USB device, such as a USB mouse and keyboard to any of these connectors. Two additional USB connectors are available on the back panel.

Table 2-3 Front Panel Features QRadar and QRadar Log Manager Appliances

Features	Description
Power Control Button	Press this button to manually turn the server on and off, or to work the server from a reduced-power state.
Power Supply LED	<p data-bbox="813 415 1453 478">Indicated the status of the power supply. This light is green and indicates the following statuses:</p> <ul data-bbox="813 485 1453 947" style="list-style-type: none"> <li data-bbox="813 485 1453 548">• Off - AC Power is not present, or the power supply or the LED has failed. <li data-bbox="813 554 1453 701">• Flashing slowly - If the light flashes one time per second, the server is turned off and is ready to be turned on. You can press the power-control button to turn on the server. This state lasts approximately 20 to 40 seconds. <li data-bbox="813 707 1453 800">• Flashing rapidly - If the light flashes four times per second, the server is turned off is not ready to be turned on. The power-control button is disabled. <li data-bbox="813 806 1453 833">• Lit - The server is turned on. <li data-bbox="813 840 1453 947">• Fading on and off - The server is in a reduced-power state. To wake the server, press the power-control button.
Locator LED	Use this blue LED to visually locate the server among other servers in the rack. You can use the IBM Systems Director to light this LED remotely. This LED is controlled by the IMM.
System Error LED	When this amber LED is lit, a system error has occurred. This LED is controlled by the IMM.

Back Panel Indicators and Features

The following figure shows the back panel features of the QRadar and QRadar Log Manager Appliances.



The following table describes the back panel features.

Table 2-4 Back Panel Features of QRadar and QRadar Log Manager Appliances

Features	Description
Power Supplies	Supports two power supplies.
Power Cord Connectors	Connect the power cord to this connector.
USB Connectors	Connect a USB device, such as a USB mouse or keyboard, to either of these connectors.
Ethernet Connectors	Use any of these connectors to connect the server to a network. When you use the Ethernet 1 connector, the network can be shared with the IMM through a single network cable.
serial connector	Connect a 9-pin serial device to this connector. The serial port is shared with the integrated management module (IMM). The IMM can take control of the shared serial port to perform text console redirection and to redirect serial traffic, using Serial over LAN (SOL).
video connector	Connect a monitor to this connector. The video connectors on the front and rear of the server can be used simultaneously.

Table 2-4 Back Panel Features of QRadar and QRadar Log Manager Appliances

Features	Description
NMI button	<p>The NMI button allows you to troubleshoot software and device driver errors when using certain operating systems.</p> <p>Note: Use this button only if directed to do so by qualified support personnel.</p> <p>Press this button to force a Non-Maskable Interrupt (NMI) to the microprocessor. You might have to use a pen or the end of a straightened paper clip to press the button.</p>
System Management Ethernet Connector	Allow you to connect your management interface.

3 APPLIANCE SPECIFICATIONS

The following table provides a quick reference for IBM Security QRadar appliances. For more detailed information on the appliances, such as limits and capabilities, see [Appliances Overview](#).

Table 1-1 Appliance Specifications

Appliance	Description	Basic Capacity	License Upgrade	Connections	Included Components	Dimensions	Power
QFlow 1201	QFlow appliance	200 Mbps Network Traffic	N/A	Six 10/100/1000 Base-T System Management Ethernet Connector	QRadar QFlow Collector	28" D x 17.3" W x 1.69" H	Dual Redundant 460W AC Power Supply
QFlow 1202	QFlow appliance	2 Gbps Network Traffic	N/A	Four 10/100/1000 Base-T System Management Ethernet Connector	QRadar QFlow Collector Napatech Network Adaptor	28" D x 17.3" W x 1.69" H	Dual Redundant 460W AC Power Supply
QFlow 1301	High-end QFlow appliance	2 Gbps Network Traffic	N/A	Four 1000 Base SX Multi-Mode Fiber System Management Ethernet Connector	QRadar QFlow Collector Napatech Network Adaptor	28" D x 17.3" W x 1.69" H	Dual Redundant 460W AC Power Supply
QFlow 1310	High-end QFlow appliance	10 Gbps Network Traffic	N/A	Two 10 Gbps XFP System Management Ethernet Connector	QRadar QFlow Collector Napatech Network Adaptor	28" D x 17.3" W x 1.69" H	Dual Redundant 460W AC Power Supply

Table 1-1 Appliance Specifications (continued) (continued)

Appliance	Description	Basic Capacity	License Upgrade	Connections	Included Components	Dimensions	Power
QRadar 1501	Dedicated Event Collector	2,500 EPS, controlled by associated Event Processor license 750 Log Sources	N/A	Six 10/100/1000 Base-T System Management Ethernet Connector	Event Collector, Internal storage (1.3 TB)	28" D x 17.3" W x 1.69" H	Dual Redundant 675W AC Power Supply
QRadar 1605	Dedicated Event Processor	2,500 EPS	Up to 20,000 EPS	Four 10/100/1000 Base-T System Management Ethernet Connector	Event Collector, Event Processor, and internal event storage (6.2 TB or larger)	29.5" D x 19.2" W x 3.4" H	Dual Redundant 675W AC Power Supply
QRadar 1624	Dedicated Event Processor	2,500 EPS	Up to 20,000 EPS	Two 10/100/1000 Base-T System Management Ethernet Connector	Event Collector, Event Processor, and internal event storage (16 TB or larger)	29.5" D x 19.2" W x 3.4" H	Dual Redundant 675W AC Power Supply
QRadar 1705	Dedicated Flow Processor	100,000 FPM	Up to 600,000 FPM	Four 10/100/1000 Base-T System Management Ethernet Connector	Flow Processor, with internal flow storage (6.2 TB or larger)	29.5" D x 19.2" W x 3.4" H	Dual Redundant 675W AC Power Supply

Table 1-1 Appliance Specifications (continued) (continued)

Appliance	Description	Basic Capacity	License Upgrade	Connections	Included Components	Dimensions	Power
QRadar 1724	Dedicated Flow Processor	100,000 FPM	Up to 1,200,000 FPM	Two 10/100/1000 Base-T System Management Ethernet Connector	Flow Processor with internal flow storage (16 TB or larger)	29.5" D x 19.2" W x 3.4" H	Dual Redundant 675W AC Power Supply
QRadar 1805	Combined Event and Flow Processor	1,000 EPS 25,000 FPM 750 Log Sources	Up to 2,500 or 5,000 EPS Up to 50,000, 100,000, or 200,000 FPM	Four 10/100/1000 Base-T System Management Ethernet Connector	Event Processor and Flow Processor with internal event and flow storage (6.2 TB or larger)	29.5" D x 19.2" W x 3.4" H	Dual Redundant 675W AC Power Supply
QRadar 2100	All-in-one QRadar appliance	1,000 EPS 25,000 FPM 750 Log Sources 50 Mbps network traffic	Up to 50,000 FPM	Six 10/100/1000 Base-T System Management Ethernet Connector	Event Collector, Event Processor, Single QRadar QFlow Collector, which supports up to 50 Mbps Internal storage (1.3 TB)	28" D x 17.3" W x 1.69" H	Dual Redundant 675W AC Power Supply

Table 1-1 Appliance Specifications (continued) (continued)

Appliance	Description	Basic Capacity	License Upgrade	Connections	Included Components	Dimensions	Power
QRadar 3105 (Base)	All-in-one QRadar appliance	1,000 EPS 25,000 FPM 750 Log Sources	Up to 2,500 or 5,000 EPS Up to 50,000, 100,000 or 200,000 FPM	Four 10/100/1000 Base-T System Management Ethernet Connector	Event Collector and Event Processor with internal event storage (6.5 TB or larger)	29.5" D x 19.2" W x 3.4" H	Dual Redundant 675W AC Power Supply
QRadar 3105 (Console)	QRadar Console appliance	N/A	N/A	Four 10/100/1000 Base-T System Management Ethernet Connector	Event Collector and Event Processor with internal event storage (6.5 TB or larger)	29.5" D x 19.2" W x 3.4" H	Dual Redundant 675W AC Power Supply
QRadar 3124 (Base)	All-in-one QRadar appliance	1,000 EPS 25,000 FPM 750 Log Sources	Up to 2,500 or 5,000 EPS Up to 50,000, 100,000 or 200,000 FPM	Two 10/100/1000 Base-T System Management Ethernet Connector	Event Collector and Event Processor with internal event storage (16 TB or larger)	29.5" D x 19.2" W x 3.4" H	Dual Redundant 675W AC Power Supply
QRadar 3124 (Console)	QRadar Console appliance	N/A	N/A	Two 10/100/1000 Base-T	Event Collector and Event Processor with internal event storage (16 TB or larger)	29.5" D x 19.2" W x 3.4" H	Dual Redundant 675W AC Power Supply

Table 1-1 Appliance Specifications (continued) (continued)

Appliance	Description	Basic Capacity	License Upgrade	Connections	Included Components	Dimensions	Power
QRadar Log Manager 1605	Dedicated Event Processor	2,500 EPS	Up to 20,000 EPS	Four 10/100/1000 Base-T System Management Ethernet Connector	Event Collector, Event Processor, and internal event storage (6.5 TB or larger)	29.5" D x 19.2" W x 3.4" H	Dual Redundant 675W AC Power Supply
QRadar Log Manager 1624	Dedicated Event Processor	2,500 EPS	Up to 20,000 EPS	Two 10/100/1000 Base-T System Management Ethernet Connector	Event Collector, Event Processor, and internal event storage (16 TB or larger)	29.5" D x 19.2" W x 3.4" H	Dual Redundant 675W AC Power Supply
QRadar Log Manager 2100	All-in-one QRadar Log Manager appliance	500 EPS 750 log sources	Up to 1,000 EPS	Six 10/100/1000 Base-T System Management Ethernet Connector	Event Collector, Event Processor, Internal storage (1.3 TB)	28" D x 17.3" W x 1.69" H	Dual Redundant 675W AC Power Supply
QRadar Log Manager 3105 (Base)	All-in-one QRadar Log Manager appliance	1,000 EPS 750 Log Sources	Up to 2,500 or 5,000 EPS	Two 10/100/1000 Base-T System Management Ethernet Connector	Event Collector and Event Processor with internal event storage (6.2 TB or larger)	29.5" D x 19.2" W x 3.4" H	Dual Redundant 675W AC Power Supply

Table 1-1 Appliance Specifications (continued) (continued)

Appliance	Description	Basic Capacity	License Upgrade	Connections	Included Components	Dimensions	Power
QRadar Log Manager 3105 (Console)	QRadar Log Manager Console appliance	N/A	N/A	Two 10/100/1000 Base-T System Management Ethernet Connector	Event Collector and Event Processor with internal event storage (6.2TB or larger)	29.5" D x 19.2" W x 3.4" H	Dual Redundant 675W AC Power Supply
QRadar Log Manager 3124 (Base)	All-in-one QRadar Log Manager appliance	1,000 EPS 750 Log Sources	Up to 2,500 or 5,000 EPS	Two 10/100/1000 Base-T System Management Ethernet Connector	Event Collector and Event Processor with internal event storage (16 TB or larger)	29.5" D x 19.2" W x 3.4" H	Dual Redundant 675W AC Power Supply
QRadar Log Manager 3124 (Console)	QRadar Log Manager Console appliance	N/A	N/A	Two 10/100/1000 Base-T System Management Ethernet Connector	Event Collector and Event Processor with internal event storage (16 TB or larger)	29.5" D x 19.2" W x 3.4" H	Dual Redundant 675W AC Power Supply
QRadar Network Anomaly Detection 3105	QRadar Network Anomaly Detection appliance	500 EPS 25,000 FPS	Up to 50,000, 100,000, or 200,000	Two 10/100/1000 Base-T System Management Ethernet Connector	Event Collector and Event Processor with internal event storage (6.2 TB or larger)	29.5" D x 19.2" W x 3.4" H	Dual Redundant 675W AC Power Supply

A

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What's in this appendix:

- **Notices**
- **Trademarks**

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