G-Series PoE Quick Start Guide

Introduction

The exacqVision G-Series Power over Ethernet (PoE) systems are part of the exacqVision series of network video recorders (NVR). Depending on the model, the G-Series PoE has either 8 or 16 PoE camera ports. The exacqVision G-Series PoE is an easy-to-use video recording solution, that has the full sophistication of exacqVision video management system (VMS) on a purpose built NVR, without the need to wire cameras to a power supply.

Installation

Before you turn on the exacqVision G-Series PoE server, ensure that the installation environment meets the following requirements:

Electrical requirements

⚠ **CAUTION:**

Danger of explosion if the battery is incorrectly replaced. Replace the battery with the same or equivalent type according to the manufacturer's instructions. Discard used batteries according to the manufacturer's instructions.

Attention:

Risque d'explosion si la batterie est remplacée par un type incorrect. Mettre au rebus les batteries usagées selon les instructions.

⚠ **CAUTION:** Never open the equipment. For safety reasons, the equipment should be opened only by qualified service personnel.

- This equipment is not suitable for use in locations where children are likely to be present.

  Cet équipement ne convient pas à une utilisation dans des lieux pouvant accueillir des enfants.

- This product must be supplied by a UL listed certificate power supply, with an output rated 54 VDC, 3.33 A minimum, TMA 104°F (40°C) minimum, and an altitude of 16404 ft (5000 m). If you need further assistance, contact https://www.exacq.com/support/techsupport/.

- Connect the information technology equipment (ITE) only to PoE networks without routing to the outside plant.

- The unit uses a three-wire ground cable that is equipped with a third pin to ground the unit and prevent electric shock. Do not remove or alter this pin in any way. If your outlet does not support this kind of plug, contact your electrician to replace your obsolete outlet.

- The PoE port supports 10/100 Mbps, 802.3 af/at in compliance with a total of 120 W for 8 port and 240 W for 16 port.

Mounting and operating environment requirements

- Mount the exacqVision server in a dust-free and climate-controlled location where the temperature is between 40°F to 95°F (4.5°C to 35°C) and the humidity level is less than 80% non-condensing.

- ⚠ **CAUTION:** Dust may cause components of the server to overheat, and elevated temperatures can contribute to premature hard drive failures.

- If the hard drives dispatch separately to the system, insert each drive into the hard drive slots. If the drives are numbered, ensure that you insert the correct drive into the appropriate slot.

Electrical environment requirements

- For maximum reliability, connect the exacqVision server to a UPS power supply. An online UPS filters power surges and dips that can damage the server.

- Connect a keyboard, a monitor, and a mouse to the server.

- Connect the exacqVision server network interface cards (NIC) to the appropriate network switch ports.

- Use cables with a ferrite core to connect to the monitors. If the cable does not have a ferrite core, the unit performs as expected, but may not meet CE safety regulation standards.

Johnson Controls

Starting the server

When you start the exacqVision server for the first time, create a user name and password for the operating system, then create a root user name and password for the Enterprise Manager.

1. Turn on the exacqVision server.
2. Create a user name and password for the operating system when the **Log on** dialog box appears.
3. Configure the operating system settings as required.
4. If prompted, log on to the operating system again with the user name and password that you just created.
5. When you log on, an exacqVision dialog box appears on the desktop. Create the exacqVision admin user name and password.

   ⓘ **Note:** These are not the same as the credentials you created to log on to the operating system. Use these credentials to log on to the exacqVision Server.

Configuring the server

1. Turn on the server.
2. Open the exacqVision client application and click the **Config (Setup) page** icon on the toolbar.
3. From the navigation tree, click **System Setup**, and click the **Network** tab.
4. Choose one of the following options:
   - To install the server on a network that uses static IP addressing, click **Static** and enter the IP address.
   - To install the server on a network using DHCP (dynamic host configuration protocol), click **Dynamic**. If the information does not configure automatically, contact your network administrator.
5. Click **Apply**.
6. Repeat this procedure for any additional network ports. For more information about configuring the server, refer to the *exacqVision Client User Manual*.

Configuring the client

1. Start the exacqVision client application.
2. Click the **Config (Setup) page** icon.
3. From the navigation tree, select **Add Systems**.
4. In the **System List**, select the server.
5. In the **System Information** area, type the exacqVision user name and password that you created during initial start up.
6. Select the **Connection Speed**. Choose from the following options, **Remote**, **WAN**, **LAN** or **Local**.
7. Verify that the server appears in the **Systems** list with a status showing **Connected**.

   ⓘ **Note:** If the server does not connect to the client, check for antivirus software on the remote client machine which may block the communication between the server IP addresses and ports.

8. Click **Apply**.

Connecting cameras with EasyConnect

The EasyConnect feature automatically discovers, and configures most DHCP cameras.

Before you begin:
Before you use the PoE ports, review the following information:

- Each port can connect to only one IP camera.
- Each port provides a DHCP addressing service to connect cameras.
- The 8 port NVR model has the following default IP address range for ports 1 to 8: `192.168.201.x`
- The 16 port NVR model has the following default IP address ranges:
  - Ports 1 to 8 `192.168.201.x`
  - Ports 9 to 16 `192.168.202.x`

To connect cameras to the system, complete the following steps:

1. Ensure that the cameras are in their factory default states.
2. Start the exacqVision client, and click **Config (Setup) page** on the toolbar.
3. From the navigation tree, expand the server and then select the **Configure System** node.

4. Expand **Add IP Cameras**, and then select **PoE Ports**.
5. On the back panel of the server, plug the cameras into the PoE ports.
6. Monitor the **PoE Ports** window in the exacqVision client to ensure that the cameras are configured and connect. The connection may take up to six minutes. The **PoE Ports** window shows a graphical representation of the back panel. The icons show the status of the ports. See the following table.

Table 1: Port status

Port status	Description
Off	The camera is not connected to the port.
Orange	The camera discovery and configuration is continuing.
Green	The camera is connected and streaming.
Red	There are errors with the camera. See Troubleshooting for details.

Troubleshooting

Use the status column in the PoE ports window to identify and resolve the problem. Place the cursor over the status message to view suggestions on how to resolve the issue.

The following sections contain information about the status message and possible solutions.

Table 2: Troubleshooting status messages

Status message	Problem	Solution
`Camera connection unsuccessful`	When an EasyConnect camera connects to the system, the status column in the **PoE Ports** window does not display **Connected**.	Delete and reconnect a camera. 1. Open the **Add IP Cameras** window. 2. Select the camera that you want to delete, click **Delete**. 3. Click **Rescan Network** to reconnect the camera.
`Invalid username or password`	The camera's default credentials have changed.	1. Press the **Factory Reset** button on the camera, to restore the camera's default settings. 2. Open the **Add IP Cameras** window and add the camera using the new credentials. For more information, refer to the *exacqVision Client User Manual*. 3. Use an administration account and open the Firefox browser. 4. Navigate to the camera's web page and reset the camera's credentials to its default values.

`Manual intervention required`	Either the camera has no default credentials, or DHCP is not enabled on the camera, or both.	Choose from the following options:
		• Press the **Factory Reset** button on the camera to restore the camera's default settings.
		• After resetting the camera, plug it into one of the PoE ports. Start the exacqVision client and complete the following steps:
		  a. Expand the server, select **Configure System**, then click the **Network** tab.
		  b. Select the **Show individual PoE adapters** check box, then select the PoE switch to which the camera has been plugged in.
		  c. In the **Network Configuration** pane, note the original **IP Address** and subnet mask, you will need this information in the last step.
		  d. Change the IP address to an IP address in the same subnet as the camera's IP address, and click **Apply**.
		  e. Open the browser (Firefox). Navigate to the camera's web page and change the camera's IP address to a DHCP address.
		  f. Change the PoE port IP address back to its original IP address.

`No camera detected`	The camera may not be supported.	Choose from the following options: • Ensure that the camera is on the supported camera list. Refer to https://exacq.com/integration/ipcams. • Unplug the camera and then reconnect it into the port. • Open the **Add IP** Cameras window, and click **Rescan Network**.
`Not present`	No device is connected, or there is a problem with the power supply.	Delete and reconnect the cameras to the system. See the information for *Camera connection unsuccessful* status message.

Connections

For information on the exacqVision G-Series PoE server back panel model configurations, see the following figures and table.

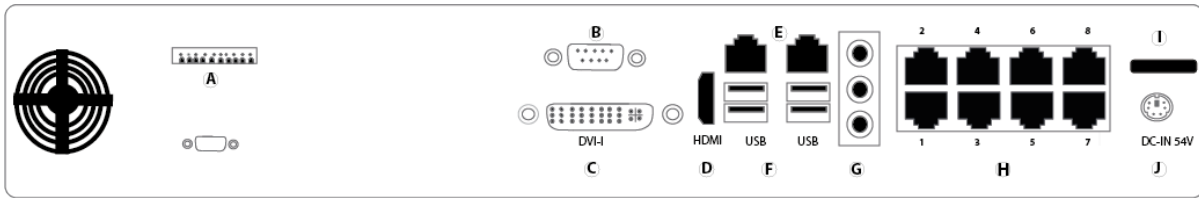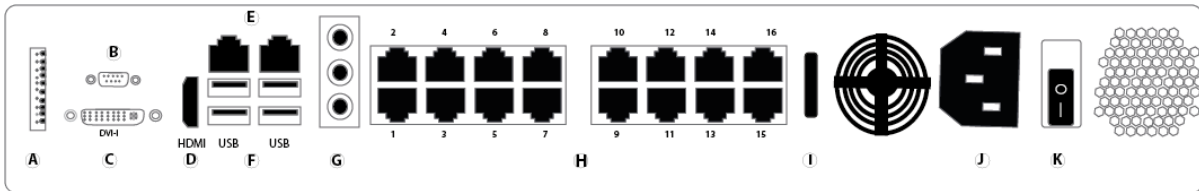**Figure 1: Back panel connectors 8 Port G-Series PoE**

Figure 2: Back panel connectors 16 Port G-Series PoE

⚠ **WARNING:** Do not connect switches, routers, computers, printers, encoders, or non-camera devices to the PoE camera ports.

Callout	Component	No. of ports	Description
A	GPIO	1	General purpose input and output currently not supported.
B	RS232 or RS485 port	1	Use this port to connect to RS232 and RS485 compatible serial devices.
C	DVI-I	1	Use this port to connect a digital LCD panel.
D	HDMI	1	Use this port to connect to a high definition display.
E	1.0 GbE RJ45 and 2.5 GbE RJ45	2	Use the relevant port to connect to a LAN.
F	USB 3.0 USB 2.0 and 3.1	4	• On the 8 port model, there are 4 USB 3.0 ports. • On the 16 port model, there are 2 USB 3.1 ports under the 1GbE port and 2 USB 2.0 ports under the 2.5 GbE port. Use the USB ports to connect to a USB keyboard, mouse, memory device, or DVD burner.
G	Audio connectors	3	• Blue: Line in receives audio signal input. • Yellow: Line out, provides audio signal output. • Red: Mic in, use to connect to an external microphone.
H	PoE LAN ports	8 or 16	Depending on the model, there are 8 or 16 ports labeled cameras-only to connect the IP PoE cameras. The LED lights on the front of the server are blue when a camera is detected. No lights display when the camera is not detected.
I	Momentary power switch	1	• On the 8 and 16 port model, press to power on the device.
J	• 54 VDC input on the 8 port model • Power supply AC input on the 16 port model	1	• On the 8 port model, use the input to plug in a DC power cord. • On the 16 port model, use the input to plug in an AC power cord.
K	Power supply switch	1	On the 16 port model only. Press the toggle switch to the **I** position to turn on the power from the power source.