Connect a video device using Power-Over-Ethernet (PoE)

Power-over-Ethernet devices can provide and receive power through an Ethernet cable's free wires. Video devices capable of using Power-over-Ethernet only require one cable for power and data.

Alarm.com Power-over-Ethernet video devices use the IEEE 802.3af standard, which is an active Power-over-Ethernet standard. For more information about Power over Ethernet, see How does Power over Ethernet (PoE) work with Alarm.com video devices?.

Options for Power-over-Ethernet cameras

The following are the options for connecting and powering Power-over-Ethernet compatible video devices.

Power-over-Ethernet switch or router

A network switch or router that provides Power-over-Ethernet and connect the camera to both the Internet and power using only an Ethernet cable.

- Each Power-over-Ethernet port on the switch/router typically provides power and data for one camera. If not, look for ports labeled *PoE*.
- Alarm.com cameras use a standard 10/100 Mbps RJ-45 Ethernet connection.

Power-over-Ethernet injector

A Power-over-Ethernet injector plugs into an outlet and a router and outputs power and data together to an Ethernet port.

- Use a Power-over-Ethernet injector when the router or switch cannot power its Ethernet ports. Alarm.com sells Power-over-Ethernet injectors on the Partner Portal (SKU: ADC-POE-INJ).
- One injector is required per camera.

ADC-W100 PoE to Wi-Fi Bridge

The ADC-W100 bridges wired Power-over-Ethernet cameras to Wi-Fi networks. The ADC-W100 plugs into an outlet within range of the Wi-Fi network and connects to a video device with an Ethernet cable.

- It provides a Power-over-Ethernet connection for one Power-over-Ethernet camera.

- This device is available from Alarm.com. For more information about the ADC-W100, see [PoE to Wi-Fi Bridge (ADC-W100)](#).

A/C adapter and Ethernet Connection

Power can be provided to Power-over-Ethernet capable cameras using a separate A/C power adapter sold by Alarm.com (ADC-VACC-PWR-VC101). The camera can be connected to the Internet using a standard Ethernet connection to a router or network switch.

Options for non-Power-over-Ethernet cameras

The following are the options for connecting a video device that is incompatible with Power-over-Ethernet:

Power-over-Ethernet splitter

A Power-over-Ethernet splitter connects to a powered Ethernet cable and splits the data and power into an Ethernet cable for data and a 2.1 mm plug for power.

Power-over-Ethernet injector and splitter combination

If the camera and router are incompatible with Power-over-Ethernet, a Power-over-Ethernet injector and splitter combination can be used for a flexible power installation.

- The injector connects to an outlet and an unpowered Ethernet cable then combines them into a powered Ethernet cable.
- The splitter connects to the powered Ethernet cable then splits it into an Ethernet cable for data and a 2.1 mm plug for power.

For indoor applications, the other cameras can use products like the AIR802 Passive Power-over-Ethernet injector to simplify DC power wiring.

The following is a visual of a Power-over-Ethernet splitter with a camera:

This ethernet cable is being powered by a PoE Injector or PoE Switch

The PoE Splitter provides an AC Power Adapter to use for power.