

POWER YOUR HIGH-POWER CAMERA WITH AN ANTAIRA SWITCH



PoE Capabilities

It is important to review the cameras' IEEE 802.3bt PoE wattage requirement for 60W or up to 90W.

Type	Standard	PSE Power Output	PD Power Input	Power Over
Type 1	IEEE 802.3af	15.4W	12.95W	2 pairs
Type 2	IEEE 802.3at	30W	25.5W	2 pairs
Type 3	IEEE 802.3bt	60W	Up to 60W	2 or 4 pairs class 0~4 4 pairs class 5~6
Type 4	IEEE 802.3bt	90W	Up to 90W	4 pairs class 7~8

Choosing a Switch that will Power the Camera

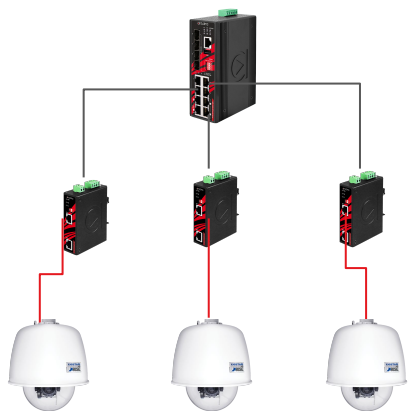


Figure 1. This topology shows a managed switch connecting to three IEEE 802.3bt 90W injectors that power three connected cameras using PoE++.

— Ethernet Connection
— PoE Connection

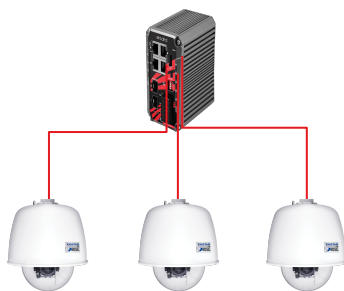


Figure 2. This topology shows a managed IEEE 802.3bt switch that powers three connected cameras using PoE++.

In the past, an injector was needed to power each BT camera. Now, Antaira switches are able to provide the power required by the camera.

Instead of using a switch + injector, it is logical to move to an Ethernet switch that is able to provide power to one or more high-power cameras.

Benefits of Choosing Antaira Switches

Transportation professionals are designing and installing networks to support higher power consumption cameras with rugged design and high end features in ITS, airport and portside applications. Antaira's **managed industrial Ethernet switches** provide an easy solution to power high-power cameras at the IEEE 802.3bt Type 4 PoE power specification.

Application Requirements:

- Provide up to 90W power output to utilize high performance features
- Industrial-grade networking devices with extended operating temperature (-40°C to 75°C)
- Rugged design and fan-less operation for field cabinet installation
- Flexible options for DIN-rail or wall-mount installation (DIN-rail and wall mounting brackets included)
- Telnet/Command Line Interface (CLI) is easy to program
- Five-year warranty; TAA & NDAA Compliant



PoE++ BT with Ping Alive

Ping Alive

Port	Enable	IP Address	Interval (sec)
*	☒	192.168.0.1	90
1	☒	192.168.0.1	90
2	☐	0.0.0.0	60
3	☐	0.0.0.0	60
4	☐	0.0.0.0	60
5	☐	0.0.0.0	60
6	☐	0.0.0.0	60
7	☐	0.0.0.0	60
8	☐	0.0.0.0	60
9	☐	0.0.0.0	60
10	☐	0.0.0.0	60
11	☐	0.0.0.0	60
12	☐	0.0.0.0	60

Save Reset

Ping Alive for Managed 802.3bt Switches

Automatic reboot of a single PoE port

- A simple yet powerful feature that gives engineers and technicians control over failed communication of edge devices.
- The feature pings the activity or inactivity of Powered Devices (PDs) and allows for an automatic reboot when a connected device becomes unresponsive, saving the traffic engineer from visiting the site for troubleshooting.

PoE++ BT with Safe PoE Disable

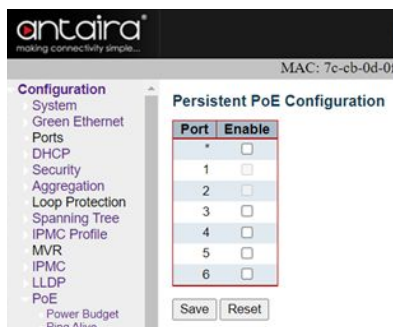
Safe PoE Disable for Managed 802.3bt Switches

PATENTED

- A hardware safety feature where ITS engineers can easily turn on/off power to a single 802.3BT PoE port using a front panel DIP switch.
- Disabling the PoE port for a high powered device adds a further level of protection against a failure possible when disconnecting the device while the PoE port is still providing power.



PoE++ BT with Persistent PoE



Persistent PoE for Managed 802.3bt Switches

PATENTED

Keeps supplying power to the end device during firmware upgrade

- This firmware feature provides powered devices with uninterrupted PoE power, thus keeping the network stable while securely capturing critical moments in the event of a firmware upgrade or switch reboot.

Low-Voltage Power Source 12VDC

Application: First Responder Vehicles

- High-power PoE applications that require 802.3bt (up to 90 Watts) send data and power (57VDC) over an Ethernet cable to supply data and power to devices, such as PTZ cameras or wireless transmitters.
- Automobile applications with only 12 volts of DC power available can use Antaira's low voltage PoE solutions to boost the 12VDC to the required 57VDC.



Low-Voltage Power Source 12VDC

External DC to AC Power Supply Sold Separately



LMP-0702G-SFP-BT-24-T-V2

4*10/100/1000Tx (90W/Port), 1*10/100/1000Tx + 2*100/1000 SFP Slots
90W Total Power Budget @ 12VDC



LMP-1204G-SFP-BT-24-T

4*10/100/1000Tx (90W/Port), 4*10/100/1000Tx (30W/Port) + 4*100/1000 SFP Slots
90W Total Power Budget @ 12VDC

Low-Voltage Power Source 24VDC

Application: Remote Solar

- Solar cells produce a wide range of voltage based on how much sun is hitting the solar panel. The power is collected by a regulator which typically controls the voltage and use it to charge a bank of batteries. In many cases, 24VDC batteries are used for this purpose.
- In high-power PoE 802.3bt (up to 100 Watts) applications, Antaira's low voltage PoE solutions boost power from 24VDC to the required 57VDC for a streamlined simple solution.



Low-Voltage Power Source 24VDC

External DC to AC Power Supply Sold Separately



LMP-0702G-SFP-BT-24-T-V2

4*10/100/1000Tx (90W/Port), 1*10/100/1000Tx + 2*100/1000 SFP Slots
180W Total Power Budget @ 24VDC



LMP-1204G-SFP-BT-24-T

4*10/100/1000Tx (90W/Port), 4*10/100/1000Tx (30W/Port) + 4*100/1000 SFP Slots
180W Total Power Budget @ 24VDC

Switch with the PoE built into one unit for a new installation or to replace the existing switch

Power Source 48~55VDC

Application: Traffic Cabinets

- Traffic cabinet provides AC power to a DC-to-AC power supply sold as an accessory with the Ethernet switch.



Power Source 48~55VDC

External DC to AC Power Supply Sold Separately



LMP-C602G-SFP-BT-T-V2

4*10/100/1000Tx (90W/Port) + 2*100/1000 SFP Slots
240W Total Power Budget @ 48~55VDC



LMP-0702G-SFP-BT-T-V2

4*10/100/1000Tx (90W/Port), 1*10/100/1000Tx + 2*100/1000 SFP Slots
240W Total Power Budget @ 48~55VDC



LMP-1204G-SFP-BT-T

4*10/100/1000Tx (90W/Port), 4*10/100/1000Tx (30W/Port) + 4*100/1000 SFP Slots
240W Total Power Budget @ 48~55VDC

Traffic cabinet provides AC power to a DC-to-AC power supply sold with the switch

Low-Voltage Models - Support Full-Range 12~55VDC

External DC to AC Power Supply Sold Separately



LMP-0702G-SFP-BT-24-T-V2

4*10/100/1000Tx (90W/Port), 1*10/100/1000Tx + 2*100/1000 SFP Slots
240W Total Power Budget @ 36~55VDC



LMP-1204G-SFP-BT-24-T

4*10/100/1000Tx (90W/Port), 4*10/100/1000Tx (30W/Port) + 4*100/1000 SFP Slots
240W Total Power Budget @ 36~55VDC



SDR-120-48
For DIN-rail
up to 120W



SDR-240-48
For DIN-rail
up to 240W



PWRCORD2-US
AC Power Cord