INJ-0201X-bt-AC-95-T

Industrial 10G PoE++ AC Injector - 1*10M/100M/1G/2.5G/5G/10G Base-T(X) (95W/Port) and 1*10M/100M/1G/2.5G/5G/10G Base-T(X); EOT: -40°C to 75°C



Hardware Manual

Version 1.0
(December 2025)

www.antaira.com

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FCC Warning

This equipment has been tested and found to comply with the limits for a Class-A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy. It may cause harmful interference to radio communications if the equipment is not installed and used in accordance with the instructions. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution: Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.

Avertissement FCC

Cet équipement a été testé et déclaré conforme aux limites d'un appareil numérique de classe A, conformément à la partie 15 des règles de la FCC. Ces limites sont conçues pour fournir une protection raisonnable contre les interférences nuisibles dans une installation résidentielle. Cet équipement génère, utilise et peut émettre de l'énergie radiofréquence. Cela peut provoquer des interférences nuisibles aux communications radio si l'équipement n'est pas installé et utilisé conformément aux instructions. Cependant, il n'y a aucune garantie qu'aucune interférence ne se produira dans une installation particulière. Si cet équipement provoque des interférences nuisibles à la réception radio ou télévision, ce qui peut être déterminé en éteignant puis en rallumant l'équipement, l'utilisateur est encouragé à essayer de corriger les interférences par une ou plusieurs des mesures suivantes:

- Réorientez ou déplacez l'antenne de réception.
- Augmentez la distance entre l'équipement et le récepteur.
- Connectez l'équipement à une prise sur un circuit différent de celui auquel le récepteur est connecté.
- Consultez le revendeur ou un technicien radio / TV expérimenté pour obtenir de l'aide.

CE Mark Warning

This is a Class-A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Avertissement de marque CE

Ceci est un produit de classe A. Dans un environnement domestique, ce produit peut provoquer des interférences radio, auquel cas l'utilisateur peut être amené à prendre des mesures adéquates.

Industrial PoE Injector

Hardware Manual
Version 1.0 (December 2025)

The manual supports the following models:

- INJ-0201X-bt-AC-95-T

This document is the current official release hardware manual. Please check our website (www.antaira.com) for any updated manual or contact us by e-mail (support@antaira.com).

Table of Contents

1 Overview **1**
1.1 Product Hardware Features 1
1.2 Package Contents 1
2 Hardware Description **2**
2.1 Physical Dimensions 2
2.2 Front View Panel 3
2.3 LED Indicators 3
2.4 Cabling Notice 3
2.5 PoE Pin Assignment 4
2.6 Power Connection 4
2.7 Grounding Note 5
3 Mounting Installation **6**
3.1 DIN-Rail Mounting 6
3.2 Wall Mounting 7
4 Hardware Installation **8**
4.1 Maintenance and Service 8

1 Overview

Antaira Technologies' INJ-0201X-bt-AC-95-T ultra-high power hardened 10GBE Gigabit PoE injector features two 10G RJ45 copper interfaces to support high-speed data transmission. It also includes an IEC C14 power input socket, offering greater installation flexibility for your PoE deployment.

Engineered to meet the increasing demands for both power and speed, it is ideal for high-performance network devices such as Wifi radios, machine vision cameras, outdoor IP surveillance cameras, PoE PTZ speed dome cameras, and other bandwidth- and power-intensive equipment.

1.1 Product Hardware Features

System Interface and Performance

- Embedded 1*10/100/1000/2.5G/5G/10GBASETx RJ45 port (95W/Port) and 1*10/100/1000/2.5G/5G/10GBASETx RJ45 port
- Support IEEE 802.3af/at/bt Compliant PoE
- Support short-circuit and current-overloading protection for PoE application

Product Input

- 85~264VAC or 120~370VDC

Operating Temperature

- -40°C to 75°C

Case / Installation

- IP40 protection aluminum housing
- DIN-Rail and wall mount design

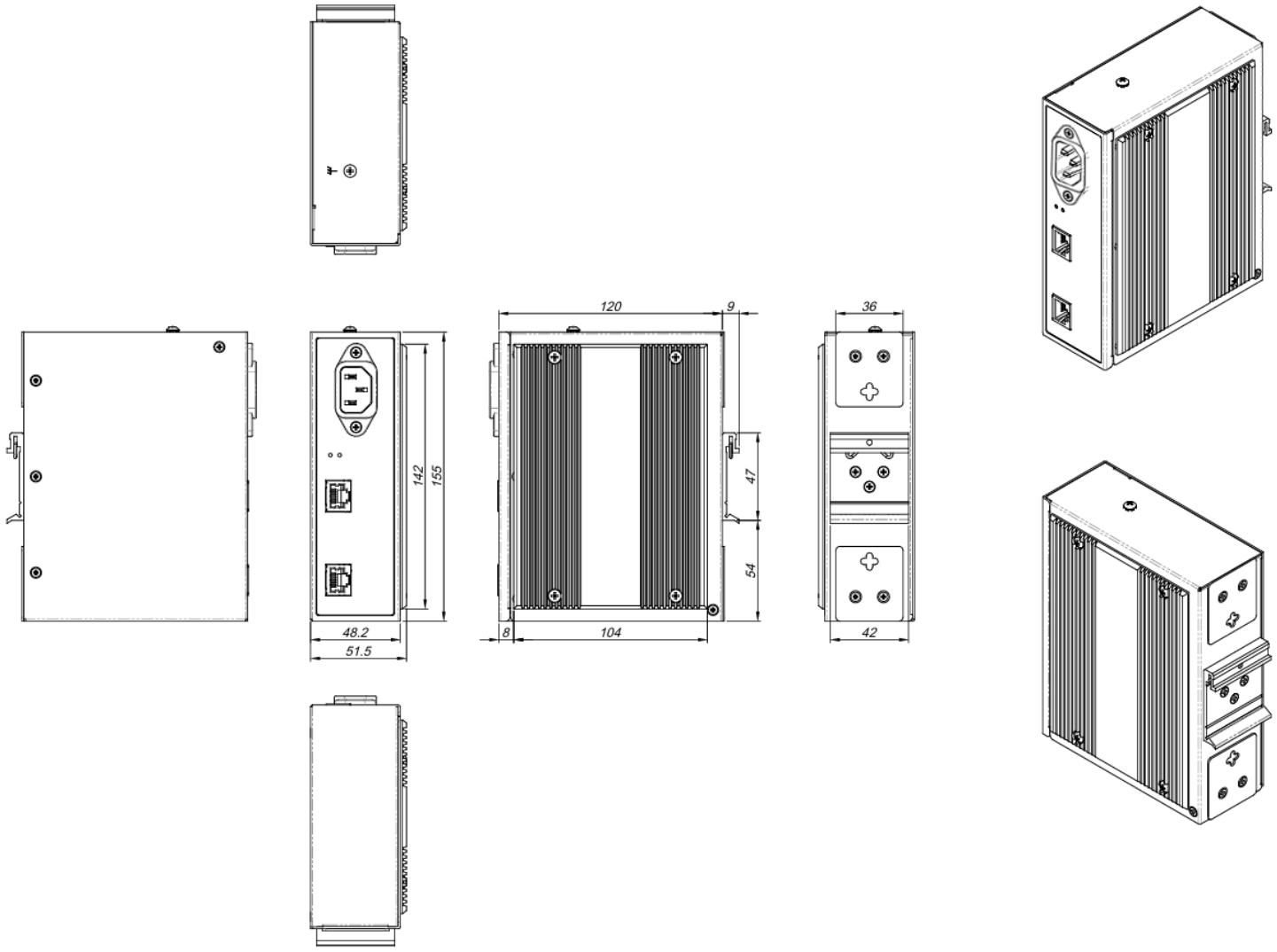
1.2 Package Contents

- INJ-0201X-bt-AC-95-T
- Quick Installation Guide
- DIN-Rail bracket
- Wall mount brackets

2 Hardware Description

2.1 Physical Dimensions

Figure 2.1, below, shows the physical dimensions of this product series:



(W x D x H) is 51.5mm x 120mm x 155mm

Figure 2.1 - Physical Dimensions

2.2 Front View Panel

Figure 2.2, below, shows the front panel of the product series:

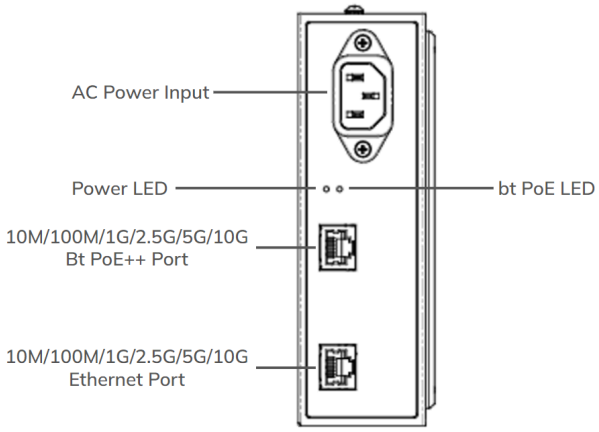


Figure 2.2 - Front View Panel

2.3 LED Indicators

There are LED light indicators located on the front panel of the industrial PoE injector that display the power status and PoE status. Each LED indicator has a different color and has its own specific meaning, see below in *Table 2.1*.

LED	Color	Description	
PoE	Amber	On	PD is detected on designated port
		Off	PD is not detected
PWR	Green	On	Power is detected

Table 2.1 - LED Indicators

2.4 Cabling Notice

Always make sure the total length of the TX cable DOES NOT exceed 100 meters. Total length is defined as length A + length B.

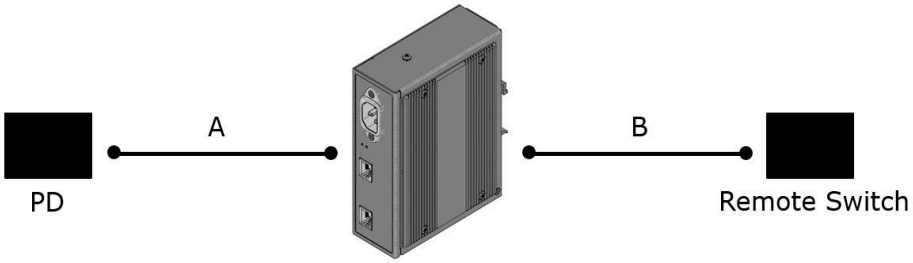


Figure 2.3 - Cable Length

PoE signal attenuates every meter, the built-in transformer allows the attenuation to reach 100 meters to follow IEEE 802.3af/at/bt standards. The higher quality PD you connect to, the more reliable the network will be. When connecting to a poor-quality PD, it cannot generate a strong enough signal for the remote switch. Always make sure you have a high-quality PD to perform your desired network.

2.5 PoE Pin Assignment

Pin 1 (V-)	Pin 2 (V-)	Pin 3 (V+)	Pin 6 (V+)
Pin 4 (V+)	Pin 5 (V+)	Pin 7 (V-)	Pin 8 (V-)

2.6 Power Connection

This unit provides an IEC C14 power input interface. It can be operated using 85-264VAC or 120-370VDC power sources. Always make sure your input voltage is within this supported voltage range.

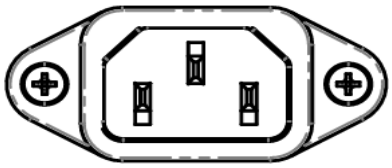


Figure 2.4 - Power Connection

Connect your compatible power cord to the IEC C14 power input socket on the unit. Ensure the other end of the power cord is securely plugged into a properly grounded AC outlet or a compatible DC power source within the specified input range (85-264VAC or 120-370VDC). Verify that the power source is stable and meets the voltage requirements before powering on the device.

2.7 Grounding Note

Ensure proper grounding by connecting the unit’s chassis ground to an earth ground using an appropriate grounding wire.



Figure 2.5 - Grounding Screw Symbol

Caution: Using a shielded cable achieves better electromagnetic compatibility.

Attention: L'utilisation d'un câble blindé permet une meilleure compatibilité électromagnétique

3 Mounting Installation

3.1 DIN-Rail Mounting

Please refer to *Figure 3.3* for DIN-Rail bracket installation reference.

Follow below steps for installing the industrial switch on the DIN-Rail track:

1. Insert the top of the DIN-Rail onto the track as shown below in *Figure 3.1*.
2. Lightly pull down the bracket onto the rail as shown below in *Figure 3.2*.
3. Check if the bracket is mounted tightly on the rail.
4. To remove the industrial Ethernet switch from the rail, do the opposite from the above steps.

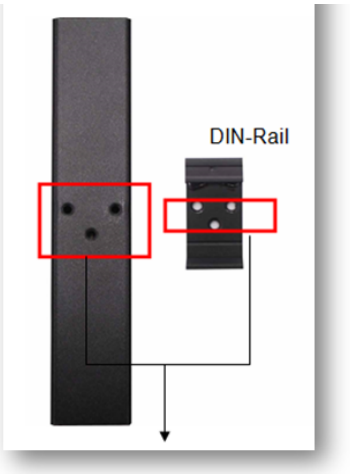


Figure 3.1 - Rear View of the PoE Injector and DIN-Rail



Figure 3.2 - Insert the Switch on the DIN-Rail

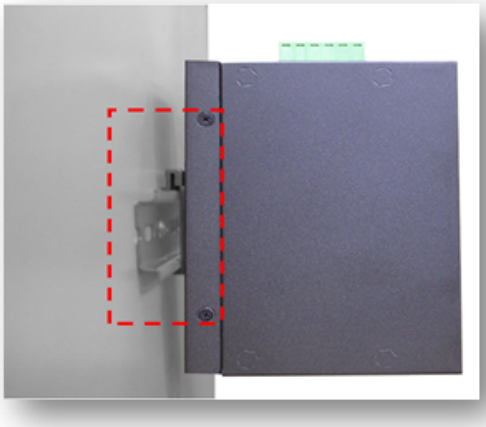


Figure 3.3 - Stable the Switch on the DIN-Rail

3.2 Wall Mounting

Follow the steps below to mount the industrial Ethernet switch using the wall mounting bracket as shown in *Figure 3.4*.

1. Remove the DIN-Rail bracket from the Ethernet switch by loosening the screws.
2. Place the wall mounting brackets on the top and bottom of the industrial Ethernet switch.
3. Use the screws to screw the wall mounting bracket on the industrial Ethernet switch.
4. Use the hook holes at the corners of the wall mounting bracket to hang the industrial Ethernet switch on the wall.
5. To remove the wall mount bracket, do the opposite from the steps above.



Figure 3.4 - Remove DIN-Rail bracket from the Switch

4 Hardware Installation

4.1 Maintenance and Service

- If the device requires servicing of any kind, the user is required to disconnect and remove it from its mounting. The initial installation should be done in a way that makes this as convenient as possible.
- Voltage/Power lines should be properly insulated as well as other cables. Be careful when handling them so as to not trip over.
- Do not under any circumstance insert foreign objects of any kind into the heat dissipation holes located in the different faces of the device. This may not only harm the internal layout, but might cause harm to the user as well.
- Do not under any circumstance open the device for any reason. Please contact your dealer for any repair needed or follow the instructions within the manual.

WARNING: When connecting PoE ports of an Ethernet Switch to non-standard Ethernet ports of a device, such as those with GND or low voltage surge protection and other alterations to IEEE 802.3 standard, DAMAGE MAY OCCUR to either or both devices. Devices with ports like these should be connected to non-PoE ports on the switch.