



# IFS POE201-MS/4 4-Port PoE-af Injector User Manual

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<b>Version</b>	This document applies to IFS POE201-MS/4 4-Port PoE-af Injector version 1.0.
<b>Certification</b>	  N4131
<b>FCC compliance</b>	<p><b>Class A:</b> 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 when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.</p>
<b>ACMA compliance</b>	<p><b>Notice!</b> 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.</p>
<b>European Union directives</b>	<p><b>2004/108/EC (EMC directive):</b> Hereby, UTC Fire &amp; Security declares that this device is in compliance with the essential requirements and other relevant provisions of Directive 2004/108/EC</p>



**2002/96/EC (WEEE directive):** Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points. For more information see: [www.recyclethis.info](http://www.recyclethis.info).

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information**

[www.utcfireandsecurity.com](http://www.utcfireandsecurity.com) or  
[www.interlogix.com](http://www.interlogix.com)

**Customer support**

[www.interlogix.com/customer-support](http://www.interlogix.com/customer-support)



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# Package Contents

Thank you for purchasing the IFS POE201-MS/4, an IEEE 802.3af High Power over Ethernet Injector Hub.

Open the package containing the Ethernet Injector Hub and carefully unpack it. The box should contain the following items:

- POE201-MS/4 x1
- User Manual x1

If any of these items are missing or damaged, please contact your distributor or IFS Sales Rep. If possible, retain the original carton and packaging material and use them again to repack the product in case there is a need to return it to us for repair.

## Product Features

The IFS POE201-MS/4 is a 4-Port IEEE 802.3af Power over Ethernet injector hub complies with IEEE 802.3, IEEE 802.3u and IEEE 802.3af standards. Equipped with 4 10/100Base-TX Fast Ethernet ports, the POE201-MS/4 supports full 48V DC power for any remote IEEE 802.3af powered device (PD) like Wireless LAN Access Point, IP Phone, and IP Camera. Providing up to 70 watts, the, POE201-MS/4 provides sufficient power for up to 4 remote devices.

There are 8 RJ-45 ports on the POE201-MS/4. The ports on the right panel function as "**Data**" and the other half on the left panel function as "**Data and Power**". Each of the "**Data and Power**" port has an injector which inserts DC Voltage into the CAT 5 cable allowing the cable between the Injector and Splitter to transfer data and power simultaneously.

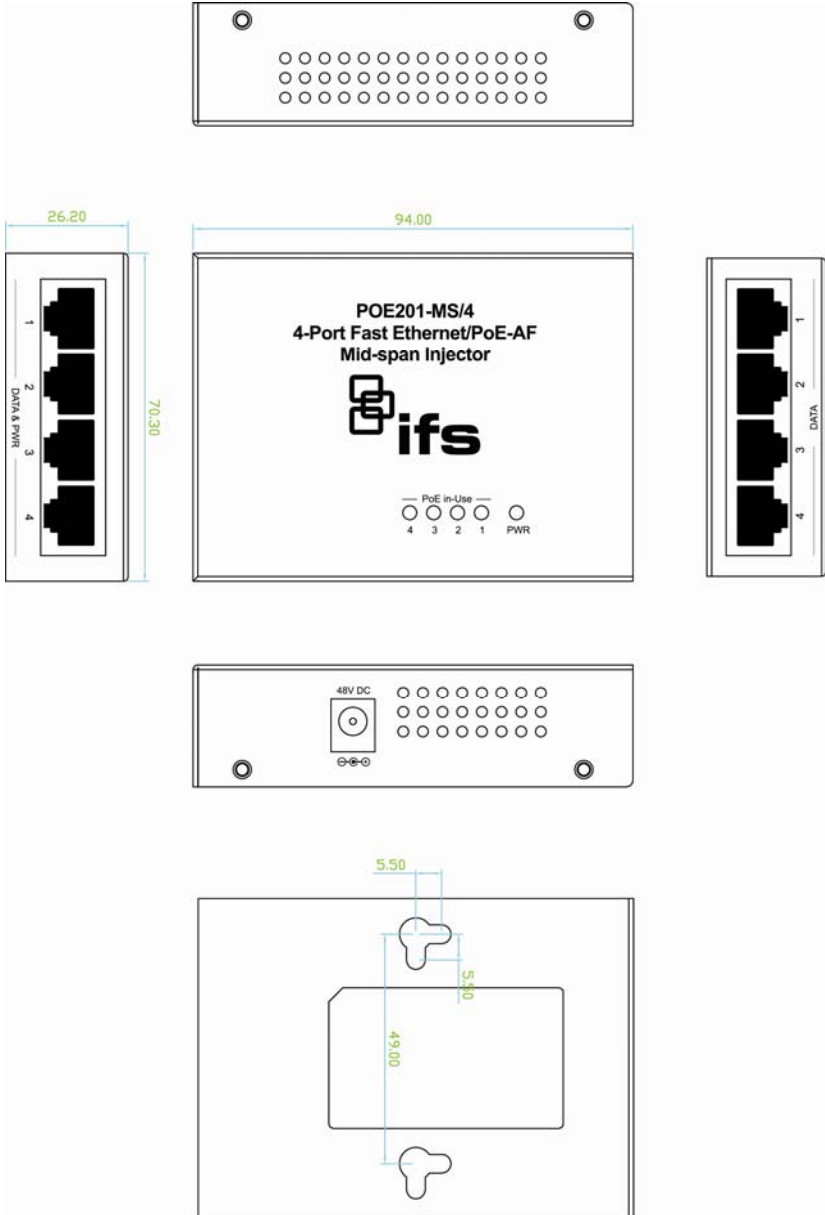
- Complies with IEEE 802.3, IEEE 802.3u, 10/100Base-TX
- Complies with IEEE 802.3af, 48V DC power over unused twisted-pair wires
- 4-Port IEEE 802.3af in-line mid-span power injector box

- Full power support (15.4W) on each POE port
- Circuit protection prevents power interference between ports
- LED indicators power input indication
- Small Compact Design

# Product Overview

Figure 1 shows the front and side panels of the POE201-MS/4.

Figure 1: POE201-MS/4 Front and Side Panels



# LED Indicators

## POE201-MS/4 LED indicators

LED	Color	Function
PWR	Green	Lit indicates that the POE201-MS/4 has power.
PoE In-use	Green	Lit indicates that the PoE port is providing 56VDC in-line power.

# Hardware Installation

This product provides two different running speeds – 10Mbps and 100Mbps- in the same device and automatically distinguishes the speed of the incoming connection.

This section describes the hardware features of the POE201-MS/4. Before connecting any network device to the POE201-MS/4, read this chapter carefully.

## Before Installation

The POE201-MS/4 requires an AC-DC adapter with DC 48V input and injects this DC power into the pins of the twisted pair cable (pair 4, 5 and pair 7, 8).

If there is no convenient location to plug the AC-DC Adapter of your non-IEEE 802.3af networked device, the POE201-MS/4 and SP-POE can provide a way to supply DC power for this Ethernet device conveniently and easily.

The 10Mbps or 100Mbps speed, duplex mode from Data port of the POE201-MS/4 depends on which Ethernet device is attached.

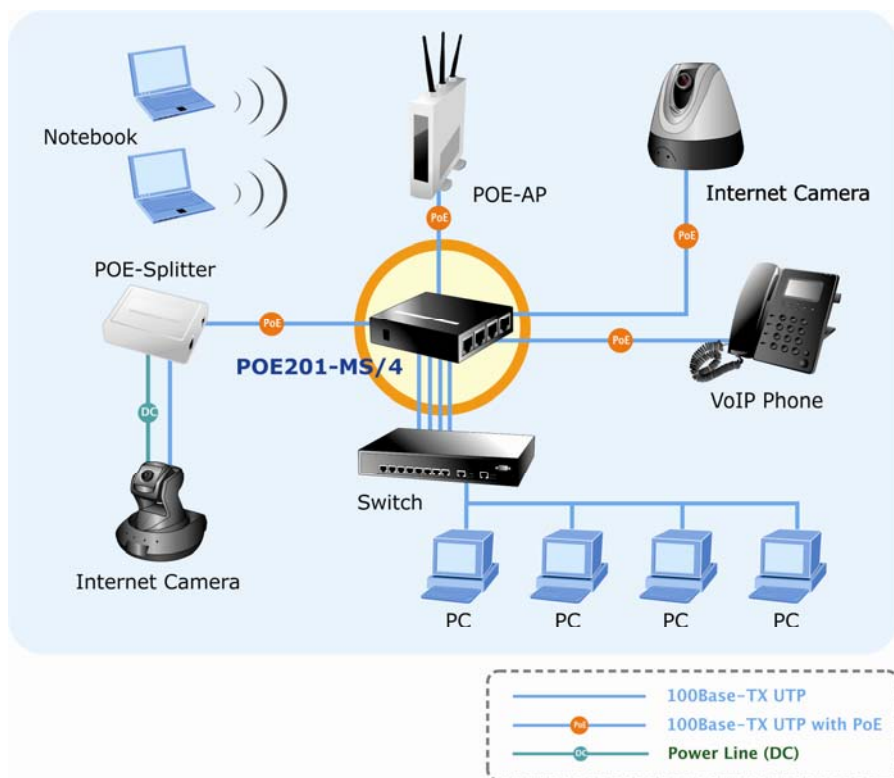
## Injector Installation

For installation locations where it's hard to find a power outlet, the POE201-MS/4 provides an easier way to power your

Ethernet devices such as an IFS IEEE 802.3af Power over Ethernet Splitter (SP-POE) for non-PoE devices.

The POE201-MS/4 can be directly deployed to connect the third party IEEE 802.3af devices installed 100 meters away.

**Figure 2: Connection Architecture**



**Note:** According to the IEEE 802.3af standard, the POE201-MS/4 will not inject power to the cable if it is not connected to IEEE 802.3af devices.

# Troubleshooting

This chapter contains information to help you solve problems. If the POE201-MS/4 is not functioning properly, make sure the POE201-MS/4 is set up according to instructions in this manual.

## **How can my non IEEE 802.3af network devices can work with the POE201-MS/4?**

**Solution:** You can use IFS Power over Ethernet Splitter, such as the IFS SP-POE to work as a power transformer between the POE201-MS/4 and non-IEEE 802.3af devices.

## **The PoE LED is not lit**

**Solution:** Check the cable connection between the POE201-MS/4 and IEEE 802.3af device.

## **Why is the PoE device not powered although it's connected to the POE201-MS/4?**

**Solution:** Please check the cable type of the connection from POE201-MS/4 to the other end. The cable should be an 8-wire UTP, Category 5/5e, EIA568 cable within 100 meters. A cable with only 4-wire, short loop or over 100 meters, all will affect the power supply.

Please check and assure the device that fully complied with IEEE 802.3af standard.

# Appendix A: Network Connection

## RJ-45 Pin Assignments

### 10/100Mbps, 10/100Base-TX

RJ-45 Connector pin assignment		
Contact	MDI Media Dependant Interface	MDI-X Media Dependant Interface -Cross
1	Tx + (transmit)	Rx + (receive)
2	Tx - (transmit)	Rx - (receive)
3	Rx + (receive)	Tx + (transmit)
4, 5	IEEE 802.3af DC 48V	
6	Rx - (receive)	Tx - (transmit)
7, 8	IEEE 802.3af DC 0V	

### The standard RJ-45 receptacle/connector

There are 8 wires on a standard UTP/STP cable and each wire is color-coded. The following shows the pin allocation and color of a straight cable and crossover cable connection:



Figure A-1: Straight-Through and Crossover Cable

Please make sure that the cables used are with same pin assignment and color as above picture before deploying the cables into your network.

### **Energy Saving Note of the Device**

This power required device does not support standby mode operation.

For energy saving, please remove the power cable to disconnect the device from the power circuit.

Without removing the power cable, the device will still consume power from the power source. For energy savings and reducing the unnecessary power consumption, we strongly suggest that you remove the power connection for the device if this device is not intended to be active.

# Specifications

Model	POE201-MS/4
Ethernet Connector	8-Port RJ-45 STP with 4-Port <b>"Data"</b> and 4-Port <b>"Data and Power"</b>
Ethernet Data Rate	10/100Mbps( vary on Ethernet device attached)
Input Voltage	DC 48V, 1.5A
Number of Device can be Powered	4
Ethernet Cable	TIA/EIA-568, Category 5/5e cable
LED Indicator	1 x power, 4 x POE ready / in-use
Operating Environment	0~50 Degree C, 5%~90%RH
Storage Environment	-10~70 Degree C, 5%~90%RH
Dimension (H x W x D)	26 x 70 x 97mm
Weight	220g
Emission	FCC Class B, CE mark
Standard Compliance	IEEE 802.3 Ethernet IEEE 802.3u Fast Ethernet IEEE 802.3af Power over Ethernet

# Contacting Technical Support

Contact technical support if you encounter any difficulties during this installation. Please contact us by phone or go to [www.interlogix.com/customer-support](http://www.interlogix.com/customer-support).

## Technical Support

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### Europe, Middle East and Africa

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W     Select *Contact Us* at [www.utcssecurityproducts.eu](http://www.utcssecurityproducts.eu)

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