

POE303-MS: Single-Port 10/100/1000 Mbps Ultra PoE (60 watts) User Manual

Figure 1: POE303-MS



Package Contents

Thank you for purchasing IFS POE303-MS Single-Port 10/100/1000Mbps.

Model	LAN Port Speed	PoE Standard	PoE Budget
POE303-MS	10/100/1000Mbps	IEEE 802.3at/af	60 watts

Please unpack the box of the POE303-MS carefully. The box should contain the following items:

- The Single-Port 10/100/1000Mbps ultra PoE injector x 1
- User manual x 1
- Power Supply PS56VDC72W-XX is ordered separately

If any of these are missing or damaged, please contact your dealer immediately. If possible, retain the carton including the original packing material, and use them again to repack the product in case there is a need to return it to us for repair.

Product Features

- **Interface**
 - 2-Port RJ-45 interfaces
 - 1-Port **Data + Power** output
 - 1-Port **Data input**
 - 1 DC 52~56V input power socket
- **Power over Ethernet**
 - Ultra Power over Ethernet End-Span / Mid-Span PSE
 - IEEE 802.3at PoE compliant
 - Backward compatible with IEEE 802.3af PD device
 - Supports PoE Power up to 60 watts for PoE port

Auto-detection of PoE IEEE 802.3at/af equipment and devices from being damaged by incorrect installation

Remote power feeding up to 100m

- **Power over Ethernet**

Complies with ultra Power over Ethernet End-Span/Mid-Span PSE

IEEE 802.3at PoE compliant

Distance up to 100 meters

IEEE802.3af Injector devices compatible

- **Hardware**

Metal case

LED indicators for Power LED and PoE In-use LED

- **Standard Compliance**

IEEE 802.3 10Base-T

IEEE 802.3u 100Base-TX

IEEE 802.3ab 1000Base-T

IEEE 802.3at High Power over Ethernet

IEEE 802.3af Power over Ethernet

FCC Part 15 Class A, CE

Note:

PSE (Power Sourcing Equipment) is a device (switch, or hub for instance) that will provides power in a PoE setup. Maximum allowed continuous output power per such device in IEEE 802.3af is 15.4 W, and in IEEE 802.3at is 30W.

PD (Powered Device) is a PoE-enabled terminal by PSE and thus consumes energy, such as PoE IP Phones, PoE IP cameras, PoE wireless access points, etc.

Product Specifications

Product	POE303-MS
Hardware Specifications	
<i>Interface:</i>	
LAN Ethernet	1 x RJ-45 STP, "Data" Input Port
Ethernet+DC (PoE)	1 x RJ-45 STP, Data + Power" Output Port
Power	1 x DC 56V Input socket

Product	POE303-MS
<i>Network Cable:</i>	
Ultra PoE (60W)	4-Pair UTP Cat. 3, 4, 5, up to 100 m (328ft)
802.3af/at PoE (15W / 30W)	2-Pair UTP Cat. 3, 4, 5, up to 100 m (328ft)
LED Indicator	System: Power x 1 (Green) PoE Port: PoE In-use x 2 (Green)
Data Rate	10/100/1000Mbps
Dimensions (W x D x H)	94 x 70.3 x 26.2 mm
Weight	237 g
Unit Output Voltage	DC 56V, 1.1 A
Power Requirements	100-240 VAC, 50/60 Hz, 1.5A (PS56VDC72 W)*
Power Consumption	60 W max.
Number of devices can be powered	1
Operating Temperature	0 to 50 degrees C
Storage Temperature	-10 to +70 degrees C
Operating Humidity	5 to 90%, Relative Humidity, non-condensing
Storage Humidity	5 to 90%, Relative Humidity, non-condensing
Power over Ethernet	
PoE Standard	Ultra PoE over 4-pair UTP, IEEE 802.3at High Power over Ethernet End-Span / Mid-Span PSE
PoE Power Output Budget	56 VDC / 55 W
PoE Power Supply Type	End-Span + Mid-Span
Power Pin Assignment	Pair 1 End-Span: 1/2(-), 3/6(+) Pair 2 Mid-Span: 4/5(+), 7/8(-)
Standards Conformance	
Standards Compliance	IEEE 802.3 10Base-T Ethernet IEEE 802.3u 100Base-TX Fast Ethernet IEEE 802.3ab 1000Base-T Gigabit Ethernet IEEE 802.3at High Power over Ethernet IEEE 802.3af Power over Ethernet
Regulation Compliance	FCC Part 15 Class A, CE

*PS56VDC72W needs to be ordered separately.

Product Outlook

Figure 1 shows the overview of the POE303-MS.

Figure 2: POE303-MS Outlook



POE303-MS LED Indicators

LED	Color	Function
PWR	Green	Lights to indicate the ultra PoE injector has power.
802.3at End-Span	Green	Lights to indicate the ultra PoE injector is working in End-Span mode and offers up to 30 watts of power.
802.3at Mid-Span	Green	Lights to indicate the ultra PoE injector is working in Mid-Span mode and offers up to 30 watts of power.

Hardware Installation

The following section describes the hardware features of POE303-MS. Before connecting any network device to them, please read this chapter carefully.

Please refer to following sections for detailed information about POE303-MS.

Before Installation

Before your installation, it is recommended to check your network environment. If there is any IEEE 802.3at device that needs higher power to be powered on and work normally, the POE303-MS provides you with a way out to supply power to this PD device conveniently and easily. The POE303-MS requires a power adaptor which is 100-240V AC input and injects DC 56V power into the pin of the twisted pair cable (pair 1/2 [-], 3/6 [+] and pair 4/5[+], 7/8[-]).

If there is difficulty in finding a power socket for AC-DC adapter of your non-PoE IEEE 802.3at PD device, the POE303-MS (Ultra PoE Splitter) can provide you with a way to supply DC power to this PD device conveniently and easily.

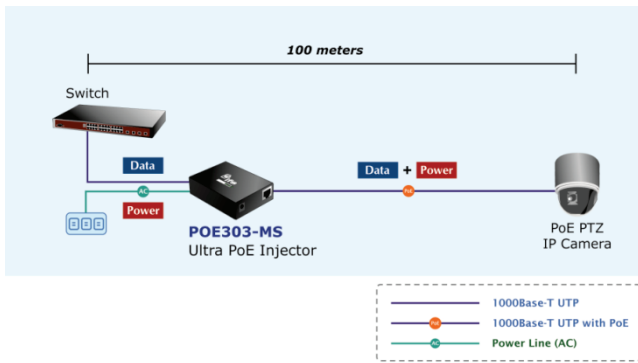
Note: The POE303-MS can be installed in a pair. However, the use of third-party device is allowed if the device complies with IEEE 802.3at Power over Ethernet.

Do Not Connect any PSE devices into the output ports of the Injector, as it may cause damage to the unit or PSE device. Verify PD supports IEEE 802-3at.

Installing the POE303-MS

1. Connect the AC power adaptor to "52-56V DC IN" of POE303-MS; the "PWR" LED will be steadily on.
2. Connect a standard Ethernet cable from an Ethernet switch or PC workstation to "Ethernet" port of POE303-MS.
3. Connect the long cable to "Ethernet+DC" port.
4. Connect with IEEE 802.3at/802.3af devices. Due to the capability of IEEE 802.3at/802.3af Power over Ethernet, the POE303-MS can directly connect with any IEEE 802.3at/802.3af end-nodes, such as PTZ (Pan, Tilt & Zoom) network cameras, PTZ speed dome, color touch-screen, Voice over IP (VoIP) telephones and multi-channel wireless LAN access points which support IEEE 802.3at/802.3af In-line Power over Ethernet port. The screen in Figure 3 appears.

Figure 2: Connecting architecture with IEEE 802.3at/802.3af devices



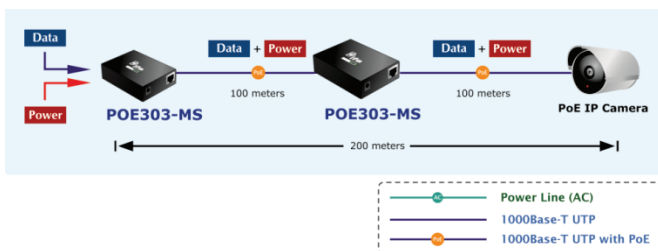
Once POE303-MS detects the existence of an IEEE 802.3at/802.3af device, the **PoE In-use** LED indicator will be steadily on to show it is providing power.

Note:

1. Since the PoE port of POE303-MS supports 52-56V DC PoE power output, please check and assure the powered device (PD) accepts DC power range of 52-56V DC. Otherwise, it will damage the powered device (PD).
2. If the connected device is not fully complied with IEEE 802.3at/802.3af Power over Ethernet or in-line power device, the LED indicator of POE303-MS will not be on steadily.

The POE303-MS installation with multiple extenders.



Figure 3: Connecting architecture with IEEE 802.3at/802.3af devices



Note: The POE303-MS can be installed in a pair. However, the use of third-party device is allowed if the device complies with IEEE 802.3at Power over Ethernet.

Do Not Connect any PSE devices into the output Ports of the Injector, as it may cause damage to the unit.

Regulatory information

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Manufacturer	Interlogix. 2955 Red Hill Avenue, Costa Mesa, CA 92626 5923, USA Authorized EU manufacturing representative: UTC Fire & Security B.V. Kelvinstraat 7, 6003 DH Weert, The Netherlands
FCC compliance	Class A: 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.
FCC conditions	This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference. (2) This Device must accept any interference received, including interference that may cause undesired operation.
ACMA compliance	Notice! 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.
Canada	This Class A digital apparatus complies with CAN ICES-003 (A)/NMB-3 (A). Cet appareil numérique de la classe A est conforme à la norme CAN ICES-003 (A)/NMB-3 (A).
Certification	 
European Union directives	12004/108/EC (EMC directive): Hereby, UTC Fire & Security declares that this device is in compliance with the essential requirements and other relevant provisions of Directive 2004/108/EC. 2012/19/EU (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 .



2013/56/EU & 2006/66/EC (battery directive):
This product contains a battery that cannot be disposed of as unsorted municipal waste in the European Union. See the product documentation for specific battery information. The battery is marked with this symbol, which may include lettering to indicate cadmium (Cd), lead (Pb), or mercury (Hg). For proper recycling, return the battery to your supplier or to a designated collection point. For more information see: www.recyclethis.info.

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