

# POE302-EX IEEE 802.3af/at

PoE+ and Ethernet Data Extender



## OVERVIEW

The IFS® Power over Ethernet Extender is a quick and easy solution that can be used when a Powered Device (PD) needs to be installed beyond the 100 meter (328 ft.) distance limitation of Ethernet. The module can be powered from any network switch with PoE or from an IFS Mid-Span Power Injector.

This module provides the ability to extend Ethernet data and PoE power on a single network cable for remote deployment of an Ethernet powered device (PD) i.e. IP camera, access control panel, VoIP or wireless access point (WAP).

The IFS POE302-EX is powered via the PoE power provided by a PoE switch or injector and thus does not require an external power adapter. Each extender requires 3.2 watts of PoE power providing the remaining power to the next extender or PD device.

Up to three POE302-EX extenders can be daisy-chained at 328 ft. (100m) intervals, based on the EIA-568 standard, to extend Ethernet data and PoE power up to 984 ft. (300m). Maximum distance (or hops) is dependent upon the remaining PoE power available to meet the PD power requirements.

The POE302-EX facilitates easier network planning by eliminating restrictions of edge device placement near AC power outlets and reducing the need for AC wiring and installation costs while delivering higher reliability. This results in a cost-effective remote power and data distribution cable management solution for a PoE-centric IP network.

## STANDARD FEATURES

### Installation

- Compact size
- Plug-and-play PoE self-powered design
- Standalone or wall-mount installation
- Can be used with an IFS PoE Injector or other IEEE 802.3af or 802.3at compliant PSE equipment

### Standards Compliance

- Supports 10/100/1000Base-TX Ethernet
- Complies with IEEE 802.3/802.3u/802.3ab
- Complies with IEEE 802.3af or 802.3at PoE Standard

### PoE Circuit

- Auto-detect of PoE IEEE 802.3af or 802.3at equipment providing protection from incorrect installation
- Current overload detection
- LED Indicators for PoE In, PoE Out, Data
- Requires 3.2 watts of PoE power to operate

### Physical Ports

- One RJ45 port for data with PoE In
- One RJ45 connector for data with PoE Power Out

### Network Cable

- For use with EIA568 Category 5 or better cables
- Can be daisy-chained to extend data and PoE on a single network cable a maximum of 984 ft. (300m).

### Warranty

- 3-year warranty

## Specifications

Ethernet	Description										
Data Rate	10/100/1000Mbps										
Throughput (packet per second)	14.8Mpps@64Bytes										
IEEE Standards	IEEE 802.3 Ethernet IEEE 802.3u Fast Ethernet IEEE 802.3ab Gigabit Ethernet IEEE 802.3x Flow Control										
Latency	4.285										
Maximum Frame Size	9K Bytes										
EIA/TIA-568 Standards	Category 5 or better										
<b>Power Over Ethernet (PoE)</b>											
PoE Standard	IEEE 802.3af or IEEE 802.3at										
PoE Power Supply Type	Mid-Span / Type B (No external power adapter required)										
PoE Output Pin Assignment	4/5(+), 7/8(-)										
PoE Output Power with Multiple Extenders	<table border="1"> <thead> <tr> <th>PoE-at 52VDC Power Source (PSE)</th> <th>PoE-af 48VDC Power Source (PSE)</th> </tr> </thead> <tbody> <tr> <td>100m (328 ft.) up to 24.6 watts</td> <td>100m (328 ft.) up to 11.9 watts</td> </tr> <tr> <td>200m (656 ft.) up to 19.2 watts</td> <td>200m (656 ft.) up to 8.4 watts</td> </tr> <tr> <td>300m (984 ft.) up to 13.8 watts</td> <td></td> </tr> <tr> <td>400m (1310 ft.) up to 9.4 watts</td> <td></td> </tr> </tbody> </table>	PoE-at 52VDC Power Source (PSE)	PoE-af 48VDC Power Source (PSE)	100m (328 ft.) up to 24.6 watts	100m (328 ft.) up to 11.9 watts	200m (656 ft.) up to 19.2 watts	200m (656 ft.) up to 8.4 watts	300m (984 ft.) up to 13.8 watts		400m (1310 ft.) up to 9.4 watts	
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<b>Connectors &amp; Indicators</b>											
Ethernet + PoE In	1 x RJ-45 (PD Mid-Span)										
Ethernet + PoE Out	1 x RJ-45 (PSE Mid-Span)										
LED Indicators	1 PoE In, 1 PoE Out , 1 Data LNK/ACT										
<b>Electrical &amp; Mechanical</b>											
Input Power (from PoE switch or mid-span injector)	Powered by an IEEE 802.3at PSE Device (injector or switch)										
PoE Output Power	48VDC @ 270mA, 52VDC @ 510mA										
Power Consumption	3.2 Watts (max.)										
Enclosure	Metal (Wall-mountable)										
Dimensions (W x D x H)	3.7 x 2.75 x 1 in. (94 x 70 x 26mm)										
Weight	0.43 lbs/197g										
<b>Environmental</b>											
MTBF	>50,000 hrs. @ 25°C										
Operating Temperature	-10°C~60°C										
Storage Temperature	-40°C~85°C										
Relative Humidity	5%~95% (non-condensing)										
<b>Standards Compliance</b>											
Regulatory	FCC Part 15 Class A, CE										
EMI	EN 55022 CLASS A EN61000-3-2 EN61000-3-3										
EMS	EN 55024 IEC 61000-4-2 IEC 61000-4-3 IEC 61000-4-4 IEC 61000-4-5 IEC 61000-4-6 IEC 61000-4-8 IEC 61000-4-11 IEC/EN 60950-1										

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North America  
T 855-286-8889

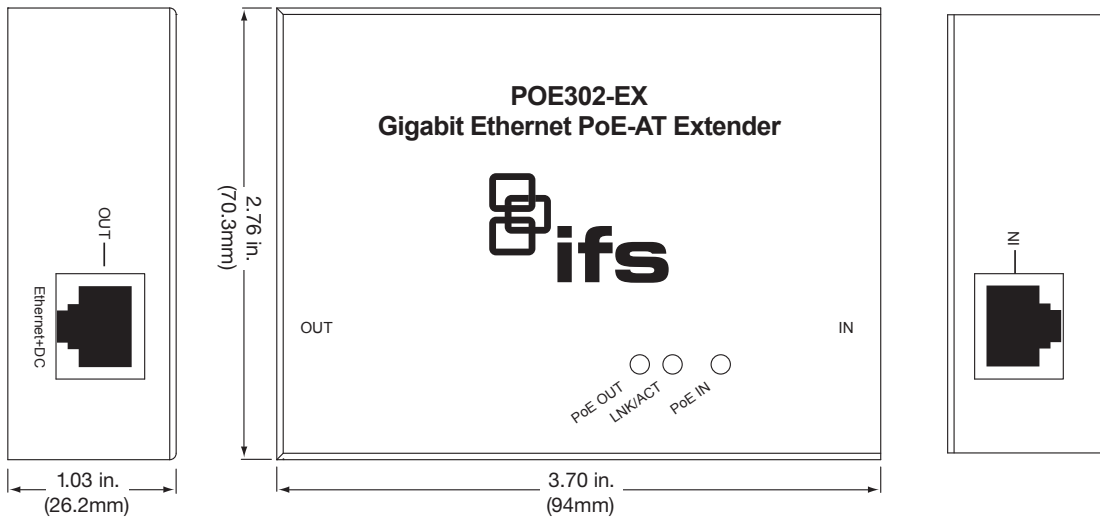
Latin America  
T 561-998-6114

## Ordering Information

**POE302-EX** IEEE 802.3at (30w) Power over Ethernet Extender (mid-span)

Note: No power adapter required. Unit is powered via PoE from a PoE switch or PoE Injector.

## Dimensional Diagrams



[interlogix.com](http://interlogix.com)

Specifications subject to change without notice.

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