

# POE302-EX

## High Power PoE and Gigabit 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 IEEE802.3at or from an IFS POE302-MS 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 just 3 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

- Plug-and-play PoE+ self-powered design
- Can be used with an IFS PoE Injector or other IEEE 802.3at compliant PSE equipment
- Supports 10/100/1000Base-TX Ethernet
- Auto-detect of PoE equipment providing protection from incorrect installation
- Current overload detection
- LED Indicators for PoE In, PoE Out, Data
- Can be daisy-chained to extend data and PoE on a single network cable a maximum of 300m.

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### Specifications

Ethernet	
Data Rate	10/100/1000Mbps
Max Throughput (packet per second)	1488000pps@64Bytes
IEEE Standards	IEEE 802.3 Ethernet / IEEE 802.3u Fast Ethernet / IEEE 802.3ab Gigabit Ethernet
Latency	1765ns (@ 64 Byte Frame)
Maximum Frame Size	9Kbytes
EIA/TIA-568 Standards	Category 5/5e cable
Power Over Ethernet (PoE)	
PoE Standard	IEEE 802.3at High Power over Ethernet PSE / Mid-Span / IEEE 802.2at High Power over Ethernet PD / Mid-Span
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	52V DC, 510mA, Max 26 Watts
Connectors & Indicators	
Ethernet + PoE In	1 x RJ-45 connector
Ethernet + PoE Out	1 x RJ-45 connector
LED Indicator	1 PoE In, 1 PoE Out, 1 Data LNK/ACT
Electrical & Mechanical	
Input Power	Powered by 56VDC from PoE Switch or Mid-Span Injector @ IEEE 802.3at
PoE Output Power	52VDC @ 510mA, 26 watts
Maximum Powered Devices	1
Enclosure	Metal
Dimensions (W x D x H)	3.7 x 2.75 x 1 in. (94 x 70 x 26mm)
Weight	0.47 lbs/215g
Power consumption	3 watts from PoE uplink
Environmental	
MTBF	>50,000 hrs. @ 25°C
Operating Temperature	-10° ~ 60°C
Storage Temperature	-40° ~ 85°C
Relative Humidity	5% ~ 90% (non-condensing)
Standards Compliance	
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

### Ordering Information

Part No.	Description
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