

POE201-EX IEEE 802.3af

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 MS-PoE 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 POE201-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 two watts of PoE power providing the remaining power to the next extender or PD device.

Up to three POE201-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 POE201-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 compliant PSE equipment

Standards Compliance

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

PoE Circuit

- Auto-detect of PoE IEEE 802.3af equipment providing protection from incorrect installation
- Current overload detection
- LED Indicators for PoE In, PoE Out, Data
- Requires only 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	10/100Mbps
Throughput (packet per second)	148810pps@64Bytes
IEEE Standards	IEEE 802.3 Ethernet IEEE 802.3u Fast Ethernet IEEE 802.3x Flow Control
Latency	7.840µs
Maximum Frame Size	1552 Bytes
EIA/TIA-568 Standards	Category 5/5e cable

Power Over Ethernet (PoE)	
PoE Standard	IEEE 802.3af Power over Ethernet PSE / Mid-Span IEEE 802.2af 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	Class 1 (3.8 watts) 300m (984 ft.) Class 2 (6.5 watts) 300m (984 ft.) Class 3 (12.9 watts) 200m (656 ft.) Non-PoE (Data Only) 300m (984 ft.)

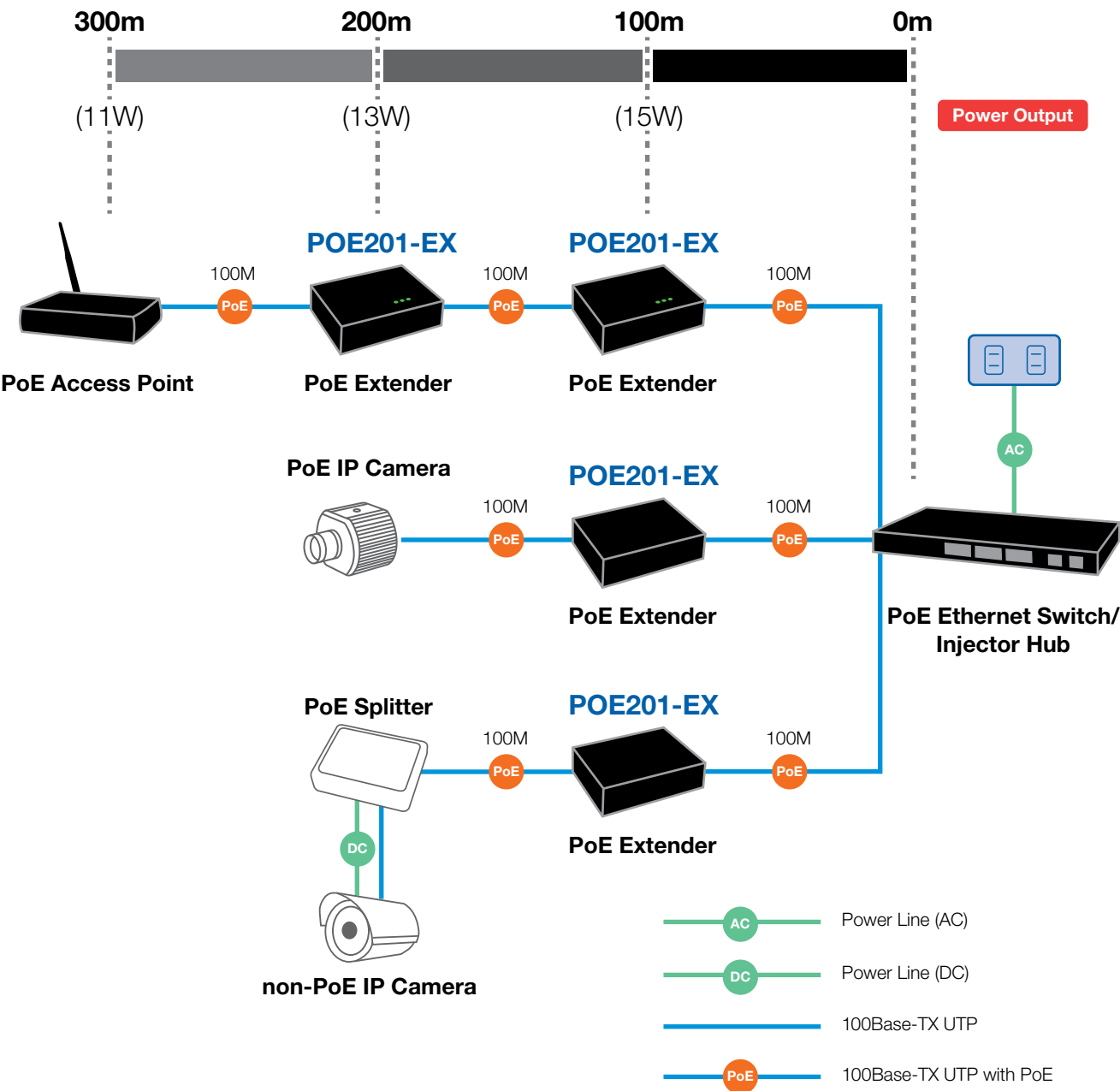
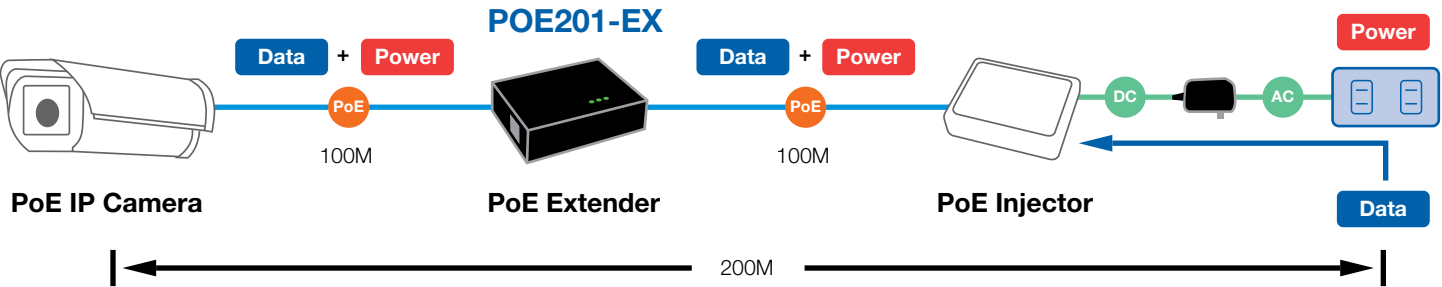
Connectors & Indicators	
Ethernet + PoE In	1 x RJ-45 connector (10/100Base-TX & 802.3af PD Mid-Span)
Ethernet + PoE Out	1 x RJ-45 connector (10/100Base TX & 802.3af PSE Mid-Span)
LED Indicator	1 PoE In, 1 PoE Out , 1 Data LNK/ACT

Electrical & Mechanical	
Input Power	Powered by 48VDC from PoE Switch or Mid-Span Injector @ IEEE 802.3af
PoE Output Power	48VDC @ 270mA, 13 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

Environmental	
MTBF	>50,000 hrs. @ 25°C
Operating Temperature	0° ~ 50°C
Storage Temperature	-20° ~ 70°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

Typical Application



POE201-EX

IEEE 802.3af

PoE and Ethernet Data Extender

North America T 855-286-8889	Asia T 852-2907-8108	Australia T 61-3-9239-1200	Europe T 32-2-725-11-20	Latin America T 561-998-6114
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Ordering Information

POE201-EX	IEEE 802.3af Power Over Ethernet Extender (mid-span)
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Note: No power adapter required.

Dimensional Diagrams

