

ED3238

10/100BASE-TX IEEE802.3af PoE Ethernet Extender over Coaxial Cable



Overview

The ED3238 Ethernet Extender utilizes EtherWAN's exclusive Power over Link™ (PoL™) technology to deliver both PoE power and Ethernet communications over a single legacy coaxial cable. The ED3238 PoL solution is comprised of an ED3238 Transmitter and Receiver working together to provide reliable communications and power to remote PoE Powered Devices (PD).

When remote connectivity and power is required on legacy cable, the ED3238 transceiver connected with an AC/DC power adaptor which provides 15.4 watts of power and a bandwidth of 100Mbps to be delivered to the ED3238 receiver. The ED3238 receiver in turn powers up a remote PoE device such as an IP camera, a wireless access point, an emergency intercom, or a VoIP phone.

The ED3238 is compliant with UL60950-1 / IEC60950-1 standards with high electromagnetic sustainability and IEC60068 standards against shock and vibration, ensuring a reliable connection under harsh environments.

Spotlight

- **Power over Link™ up to 180 m (590 ft.)**
 - A superb 15.4 watts power with with 100Mbps bandwidth is delivered to the receiving side by 30m (min.) or 180m (max.) long coaxial cable.
- **Ethernet extension solution with high transmission data rate up to 100Mbps**
 - Up to 180 meters* transmission distance with 100Mbps data rate
- **Powered by IEEE802.3at Devices**
 - ED3238 transmitter side can be powered either by an IEEE802.3at PoE/PSE device or a 57VDC adaptor

* Operating distance: 30 to 180m

Hardware Specifications

Technology

Standards

- IEEE802.3 10BASE-T
- IEEE802.3u 100BASE-TX
- IEEE802.3af PoE/PSE

Forward and Filtering Rate

- 1,488,100pps for 1000Mbps

Processing Type

- IEEE802.3x Full-duplex flow control
- Auto Negotiation
- Auto MDI/MDIX

Power

Input

- DC Jack: 57VDC
- ED3238T PoE/PD port: 50VDC to 57VDC

Power Consumption

- Device: Max. 6W
- PoE power budget: 15.4W max.
(depending on power input)

Input Voltage v.s. Output Power

DC Jack Input Voltage	RG6/U 18AWG CCS	ED3238R PoE/PSE Output Power	RG11 14AWG CCS	ED3238R PoE/PSE Output Power
50VDC	180m	5.5W	250m	11W
51VDC	180m	7.0W	250m	13W
52VDC	180m	9.0W	250m	15W
52VDC	180m	10.5W	250m	16W
54VDC	180m	12.0W	250m	17W
55VDC	180m	14.0W	250m	17W
56VDC	180m	15.4W	250m	18W
57VDC	180m	15.4W	250m	18W

Mechanical

Casing

- Aluminum Case
- IP30

Dimensions

- 46mm (W) x 98mm (D) x 25mm (H)
(1.81" (W) x 3.86" (D) x 0.98" (H))

Weight

- 0.1Kg (0.221 lbs.)

Installation

- Panel or Rack mounting

Interface

Ethernet Port

- ED3238T/R: 1 x RJ-45 port
- ED3238T/R: 1 x PoE/PD port
- Speed: 10/100Mbps
- Distance: 100 meters (328ft.)
- Cable: 100BASE-TX: UTP CAT. 5 (4-pair wire)

Ethernet Extender Port

- Port: One 75Ω BNC Port (with F-type connector)
- Cable: Coaxial Cable (5C2V / RG6/U)
- Distance: 250m (820ft) RG11 AWG 14 CCS coaxial cable
180m (590ft) RG6/U AWG18 CCS coaxial cable
120m (394ft) RG59 coaxial cable

LED Indicators

- Power: Power status
- LINK/ACT: Data transmission and power delivery
- PoE: PD status

Environment

Operating Temperature

- -10°C to 50°C (14°F to 113°F)

Storage Temperature

- -20°C to 70°C (-4°F to 158°F)

Ambient Relative Humidity

- 5% to 95% (non-condensing)

Regulatory Approvals

ISO

- Manufactured in an ISO9001 facility

Safety

UL60950-1 and IEC60950-1

EMI

CE

EN55022

EN55024

EN61000-3-2

EN61000-3-3

FCC Part 15B, Class A

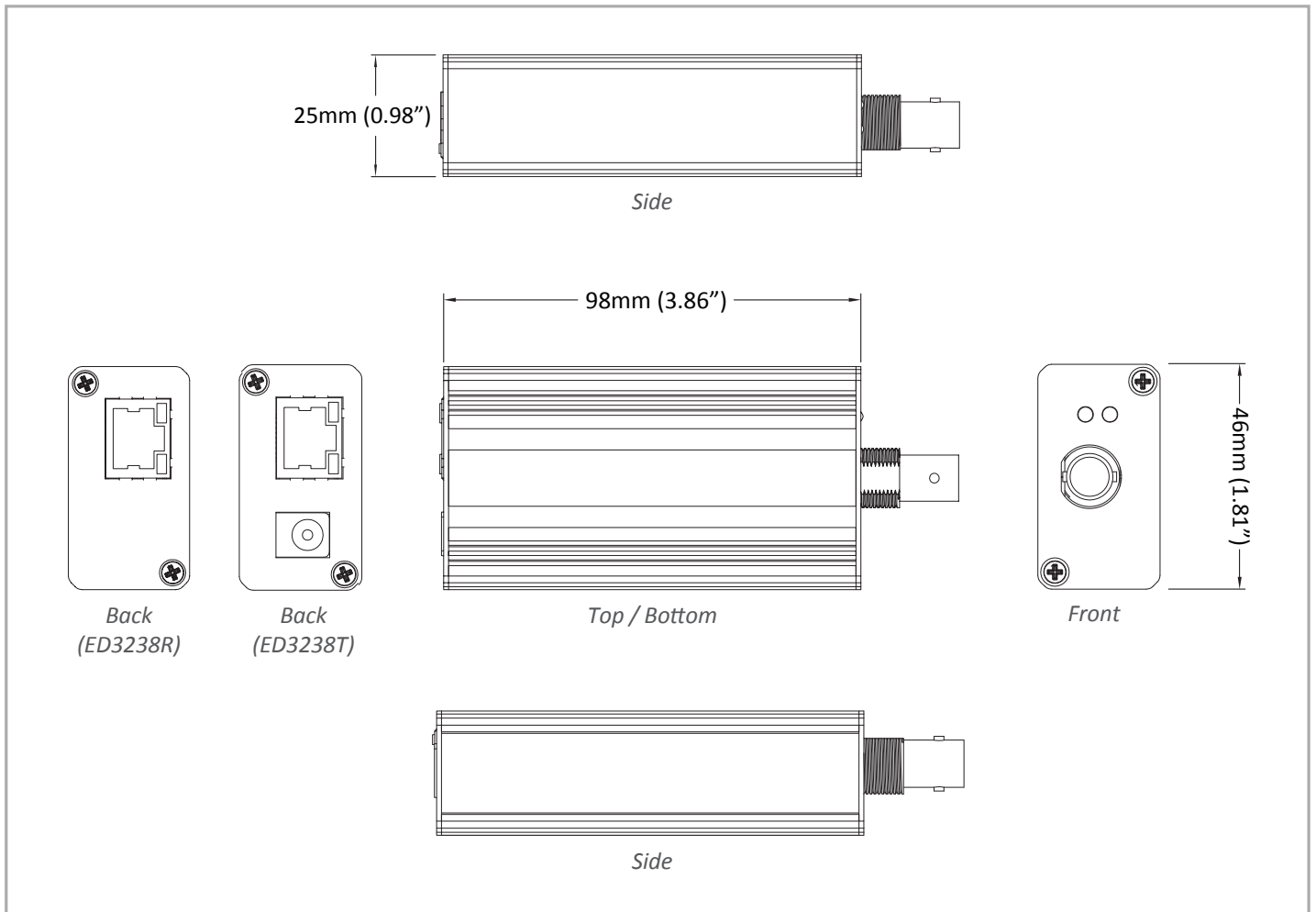
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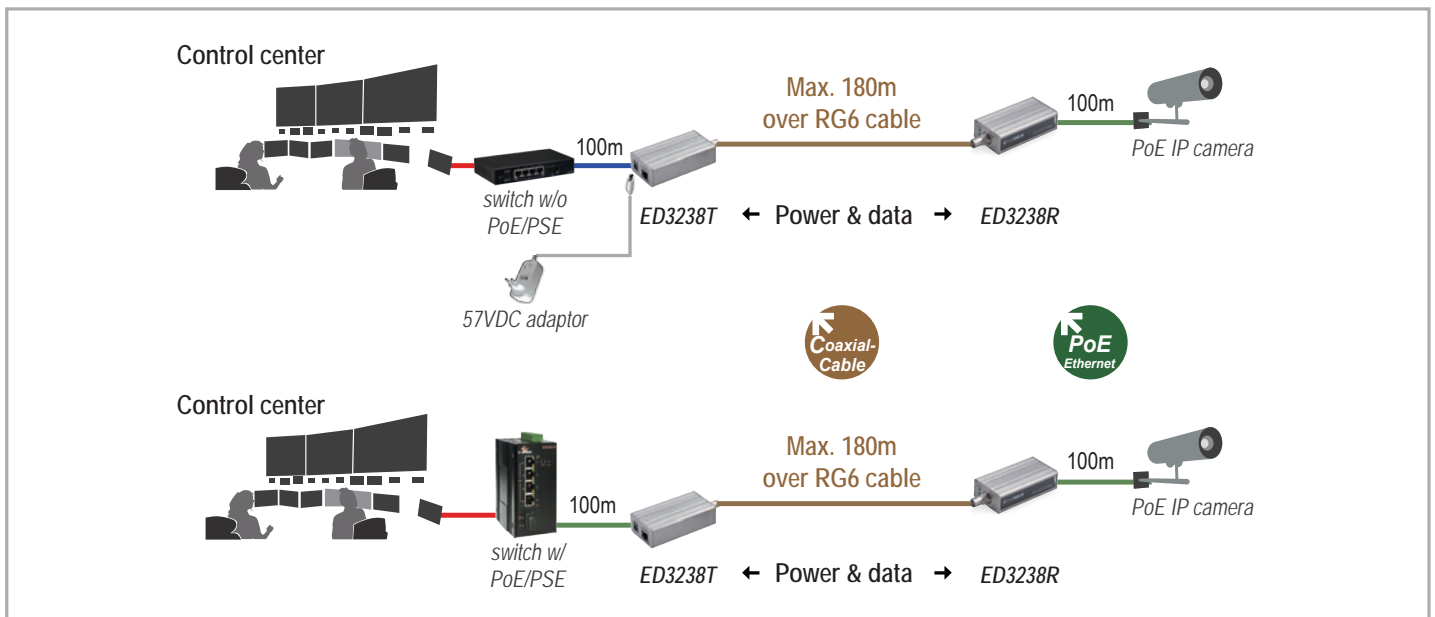
EN61000-6-2

- EN61000-4-2 (ESD Standards)
- EN61000-4-3 (Radiated RFI Standards)
- EN61000-4-4 (Burst Standards)
- EN61000-4-5 (Surge Standards)
- EN61000-4-6 (Induced RFI Standards)
- EN61000-4-8 (Magnetic Field Standards)

Dimensions



Application Diagram



Ordering Information

Model

ED3238-TRU	PoL/PoE Ethernet extender over coaxial cable (including one ED3238T, one ED3238R and one 57VDC adaptor, USA type)
ED3238-TRE	PoL/PoE Ethernet extender over coaxial cable (including one ED3238T, one ED3238R and one 57VDC adaptor, Europe type)
ED3238-TRX	PoL/PoE Ethernet extender over coaxial cable (including one ED3238T and one ED3238R)