

# 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 one transmitter and one receiver working together to provide reliable communications and power to remote PoE Powered Devices such as an IP cameras, wireless access points, emergency intercoms, or VoIP phones.

When using RG6 coaxial cable, the ED3238 transmitter provides a maximum of 15.4 watts of power and a bandwidth of 100Mbps to the ED3238 receiver, at a distance of up to 180 meters. If RG11 coaxial cable is used, the maximum transmission distance is extended to 250 meters.

The ED3238 is highly resistant to electromagnetic interference, shock, and vibration, ensuring connection reliability even in harsh environments. Its compact size makes it easy to install in areas where space is limited.

## Spotlight

- **Power over Link™ up to 180 m (590 ft.)**
    - A superb 15.4 watts power 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

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

### 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 to 50°C (14 to 113°F)

### Storage Temperature

- -20 to 70°C (-4 to 158°F)

### Ambient Relative Humidity

- 5% to 95% (non-condensing)

## Regulatory Approvals

### ISO

- Manufactured in an ISO 9001 facility

### Safety

### UL 60950-1 and IEC 60950-1

### EMI

### CE

### EN 55022

### EN 55024

### EN 61000-3-2

### EN 61000-3-3

### FCC Part 15B, Class A

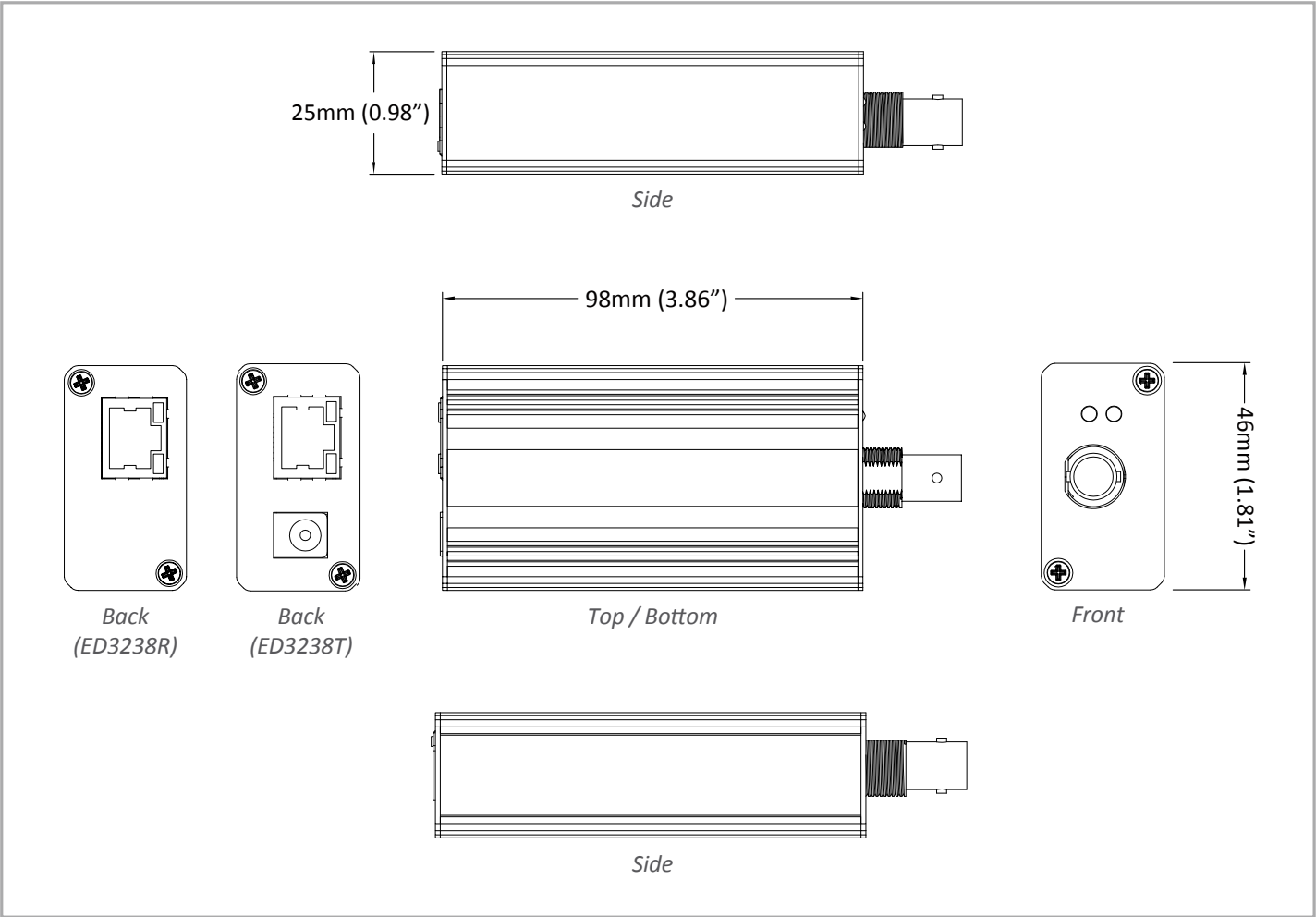
### VCCI

### EMS

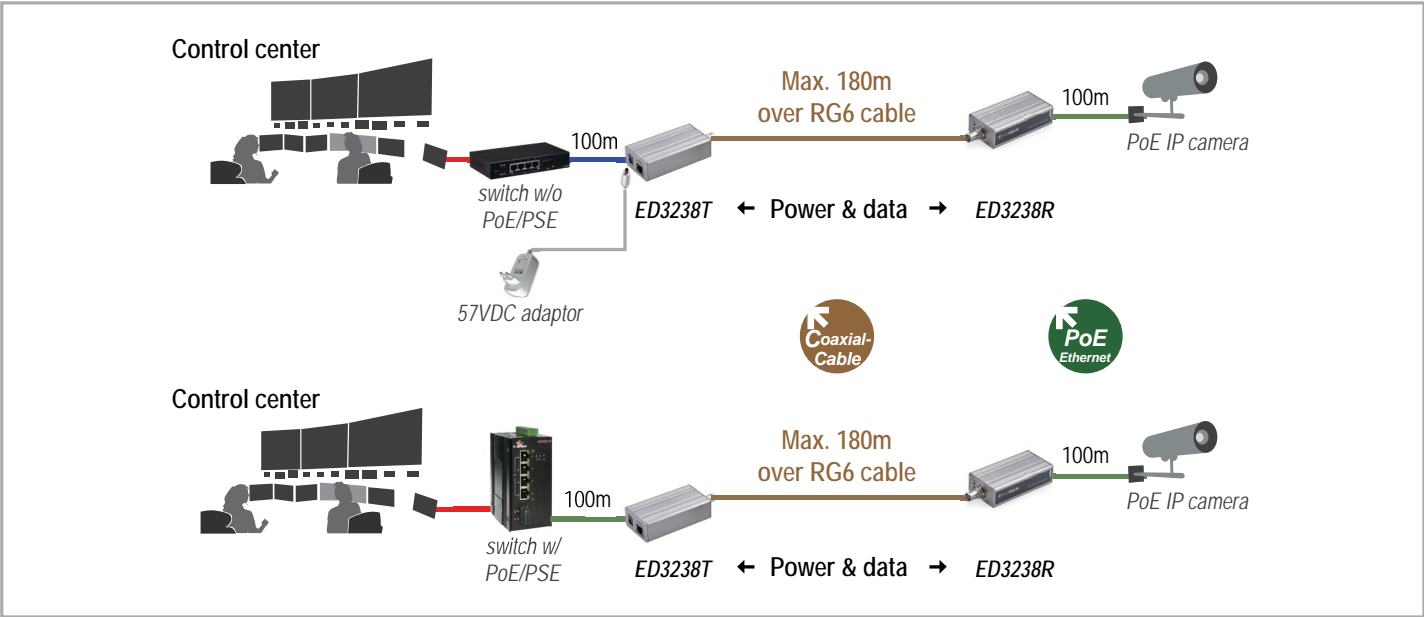
### EN 61000-6-2

- EN 61000-4-2 (ESD Standards)
- EN 61000-4-3 (Radiated RFI Standards)
- EN 61000-4-4 (Burst Standards)
- EN 61000-4-5 (Surge Standards)
- EN 61000-4-6 (Induced RFI Standards)
- EN 61000-4-8 (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)