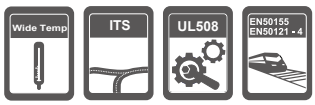
ED3344 Series

Hardened 10/100/BASE-TX M12 Ethernet Extender over Coaxial Cable



Value

- Complies with EN50155 standard requirement for Rolling Stock Ethernet applications
- Complies with EN50121-4 standard requirement for Railway station Ethernet applications

M12 Ethernet port provides strong mechanical secure capacity

Features

- Complies with NEMATS1 & TS2 Environmental requirements for Traffic control equipment
- Complies with EN50155, EN50121-3-2 and EN50121-4 Railway application requirements
- Specific design for industrial communication application UL with UL508 safety certification
- Complies with IEC61000-6-2 EMC Generic standard immunity for Industrial environment
- Ethernet Port: 10/100Mbps-Full-duplex, Auto-Negotiation, Auto-MDI/MDIX
- M12 Ethernet port provides strong mechanical secure capacity
- Ten speeds with speed indicator LEDs on front panel of unit
- Compatible with ED3331, ED3341 and ED3371
- Ethernet Extender Port: Symmetrical on the VDSL, High-speed Full duplex up to 170 Mbps communications link over existing coaxial cable
  - Up to 85Mbps @ about 200meters (656ft.)
  - 1Mbps @ about 2,600meters (8,530ft.)
- -40°C to 75°C (-40°F to 167°F) operating temperature range
- Redundant power inputs with Terminal Block and Latched DC Jack
- Support DIP switch to select Local or Remote side
- Hardened aluminum case
- Supports DIN-Rail Panel Rack Mounting installation

Ordering Information

ED3344-00B	Hardened 10/100Base-TX M12 Ethernet Extender over Coaxial Cable

Power Supply : (Optional)

*Option A - The Terminal Block type external power supplies are not included. Please order the following part numbers:

DR-30-24, DR-60-24, DR-75-24, DR-120-24 or 41-136046-X (X)=1: US, 2: EU, 3: UK, 4: AU, 5: JP

**Option B - The external power adapters and power cords are not included. Please order the following part numbers:

41-136044-X (X)=1: US, 2: EU, 3: UK, 4: AU, 5: JP

Installation Type : Optional Panel mount kit, part number: KP-AA96-480

Specifications

Technology	
Standards	• IEEE802.3 10BASE-T, IEEE802.3u 100BASE-T, IEEE802.3x
Protocols	• Transparent to higher layer protocols

Power	
Input	• Input Voltage: 12 to 48VDC (Terminal Block and Latched DC Jack)
Power Consumption	• 7.2W Max. 0.6A @ 12VDC, 0.15A @ 48VDC
Overload Current Protection	• Present
Reverse Polarity Protection	• Present

Mechanical	
Casing	• Aluminum case • IP30
Dimensions	• 50mm (W) x 110mm (D) x 135mm (H) (1.97" (W) x 4.33" (D) x 5.31" (H))
Weight	• 0.8Kg (1.76lbs.)
Installation	• DIN-Rail (Top hat type 35mm), Panel, Rack Mounting

Interface

Ethernet Port	• Port: One M12, 4Pin, D-type port, 10/100BASE-TX Full-duplex Auto-Negotiation, Auto-MDI/MDIX • Speed: 10/100Mbps • Distance: 100meters (328ft.) • Cable: 10BASE-T: UTP CAT. 3, 4, 5 (2-pair wire) 100BASE-TX: UTP CAT. 5 (4-pair wire)
Ethernet Extender Port	• Port: One 50Ω BNC Port (with F-type connector) • Speed Display: 1/5/10/20/30/40/50/60/70/75Mbps • Max. Distance: 2,600meters (8,530ft.) • Cable: Coaxial Cable (5C2V / RG58AU / RG6)

Speed / Distance Reference

Speed	Distance
1-5Mbps	2,600M(8,530ft.)
6-10Mbps	2,400M(7,874ft.)
11-16Mbps	2,000M(6,561ft.)
17-20Mbps	1,800M(5,905ft.)
21-29Mbps	1,600M(5,249ft.)
30-43Mbps	1,400M(4,593ft.)
44-54Mbps	1,200M(3,937ft.)
55-63Mbps	1,000M(3,280ft.)
64-74Mbps	600M(1,968ft.)
75-85Mbps	200M(656ft.)

DIP switch	• One DIP Switch: Local (CO) or Remote (CPE)
LED Indicators	• Per Unit: Power Status (Power) • Per Port: 10/100TX: Link/Activity, Full-duplex Line: Error, Link, Local, Remote

Environment	
Operating Temperature	• -40°C to 75°C (-40°F to 167°F) Tested @ -40°C to 85°C (-40°F to 185°F)
Storage Temperature	• -40°C to 85°C (-40°F to 185°F)
Ambient Relative Humidity	• EN50155

Regulatory Approvals	
ISO	• Manufactured in an ISO9001 facility
Safety	• UL508
EMI	• FCC Part 15, Class A • VCCI, Class A • EN61000-6-4 - EN55022 - EN61000-3-2 - EN61000-3-3
EMS	• EN50121-3-2 • EN61000-6-2 • EN61000-4-2 (ESD Standards) - Contact: + / - 6KV - Air: + / - 8KV • EN61000-4-3 (Radiated RFI Standards) - 20V/m, 800 to 1000MHz; 80% AM, 1kHz - 10V/m, 1400 to 2100MHz; 80% AM, 1kHz - 5V/m, 2100 to 2500MHz; 80% AM, 1kHz • EN61000-4-4 (Burst Standards) - Signal Ports: + / - 2KV; Criteria A, + / - 4KV - D.C. Power Ports: + / - 2KV; Criteria A, + / - 4KV • EN61000-4-5 (Surge Standards) - Signal Ports: + / - 2KV; Line-to-Line - D.C. Power Ports: + / - 0.5KV; Line-to-earth • EN61000-4-6 (Induced RFI Standards) - Signal Ports: 10Vrms @ 0.15 - 80MHz; 80% AM - D.C. Power Ports: 10Vrms @ 0.15 - 80MHz; 80% AM • EN61000-4-8 (Magnetic Field Standards) - 30A/m @ 50, 60Hz
Environmental Test Compliance	**Vibration Resistance** • EN61373: X 0.07grms, Y 0.046grms, Z 0.1grms (Operating) X 0.56grms, Y 0.375grms, Z 0.8grms (Storage/Transport) • IEC60068-2-6 Fc: 5g @ 10 - 150Hz, Amplitude 0.35mm (Operation/Storage/Transport) **Shock** • EN61373: X 5g, Y, Z 3g • IEC60068-2-27 Ea 25g @ 11ms (Half-Sine Shock Pulse; Operation) 50g @ 11ms (Half-Sine Shock Pulse; Storage/Transport) **Free Fall** • FED STD 101C Method 5007.1 (Free fall w/ package) -Tested with Cross Weight and Drop High standard table

Diagrams

Unit: mm