

ED3011 Series

Managed SHDSL Ethernet Extender



Overview

The ED3011 is a point-to-point Ethernet Extender that efficiently extends 10/100 Ethernet to over 4.4 kilometers (14,400 feet) at 2.3Mbps, (Max distance @ 6.2km) using existing straight 2-pair copper wire. The ED3011 will allow Ethernet connectivity in existing facilities without pulling extra cable. This is the perfect solution to Ethernet on the factory floor where systems have been upgraded from slower serial communications to Ethernet networking. ED3011 provides longer reach on transmission distance. Users can also select a fixed data rate for the copper line ranging from 192 Kbps to 10.8 Mbps when the bandwidth is available.

Features

- Operates transparent to higher layer protocols such as TCP/IP
- Ethernet Port : 10/100Mbps-Full/Half-duplex, Auto-Negotiation, Auto-MDI/MDIX
- Ethernet Extender (RJ-48) Port: Symmetrical on the SHDSL
- Fixed Data Rate Selection from 128Kbps to 10752Kbps for two pairs copper wire
- Adaptive Multi Rate from 192Kbps to 4608 Kbps for 1-Pair SHDSL
- Adaptive Multi Rate from 384Kbps to 9216 Kbps for 2-Pair SHDSL
- Maximum Distance: 6.2 kilometers

Ordering Information

ED3011-00Z Managed SHDSL Ethernet Extender

External Power Adapter Options:

- (Z) = A : With power code for Australia
E : With power code for Europe
J : With power code for Japan
K : With power code for UK
U : With power code for USA

Specifications

Technology

Standards:

- IEEE802.3 10Base-T, IEEE802.3u 100Base-T, IEEE802.3x, Ethernet over VDSL

Protocols:

- Transparent to higher layer protocols

Processing Type:

- Half-duplex back-pressure and IEEE802.3x Full-duplex flow control

Management:

- Console port CLI

Power

Input:

- AC : 100 ~ 240VAC, 50 ~ 60Hz Internal Universal PSU

Power Consumption:

- 8W

Mechanical

Casing:

- Metal case / IP20

Dimensions:

- 261mm (W) x 151mm (D) x 44mm (H)
(10.28" (W) x 5.94" (D) x 1.73" (H))

Weight:

- 2.5kg (5.51lbs)

Installation:

- Desktop

Interface

Ethernet Port:

- Port: Two RJ-45 port, 10/100Base-TX Full-duplex, Auto-MDI/MDIX
- Distance: 100meters (328ft.)
- Cable: 10Base-T: UTP CAT. 3, 4, 5 (2-pair wire)
100Base-TX: UTP CAT. 5 (2-pair wire)

Ethernet Extender Port :

- Port: One RJ-48 Port
- Speed:
Fixed Data Rate Selection from 128Kbps to 10752Kbps for 2-Pair copper wire
Adaptive Multi Rate from 192Kbps to 4608 Kbps for 1-Pair copper wire
Adaptive Multi Rate from 384Kbps to 9216 Kbps for 2-Pair copper wires
Distance: up to 6800 meters (22,300ft.)
- Cable: Twisted copper wire 24 or 26 AWG

NOTE:

All speed selections are Symmetrical on the DSL and Full-duplex on the Ethernet.

1 pair Data Rate (Kbps)	2 pair Data Rate (Kbps)	Max. Reach (ft)	Max. Reach (m)
4608	9216	6000	1828
3072	6144	9500	2895
2304	4608	11500	3505
2048	4096	12000	3657
1544	3088	13000	3962
1152	2304	14500	4419
768	1536	15000	4572
512	1024	16500	5029
384	768	17500	5334
256	512	19000	5791
192	384	20500	6248

(The table is based on DSL connection with 1 dB noise margin)

LED Indicators:

- Per Unit: Power Status (Power), Test
- Per Port: 10/100TX: Link/Activity, Speed
- Line: Loop1, Loop2

Environment

Operating Temperature:

- 0°C to 50°C (32°F to 122°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

EMI:

- CE Mark, Class A
- FCC Part 15, Class A
- VCCI, Class A

Diagrams

