EL-006 Ethernet Extender Over Coaxial Cable



The EL-006 is point-to-point EoCNA(Ethernet over Coax Network) solution that efficiently extends 10/100 Ethernet circuits to over 900 meters(2,952feet) at 112Mbps using existing coaxial wire. The EL-006 will allow Ethernet connectivity in existing facilities without pulling extra cable. This is perfect solution to Ethernet on the factory floor where systems have been upgraded from slower serial communication to Ethernet networking. Installation is easy with a single switch setting. One end is set for local and the other remote. The EL-006 is used in Coaxial wire to extend Ethernet connectivity over existing CCD/CATV grade Coaxial wire.

Key Features

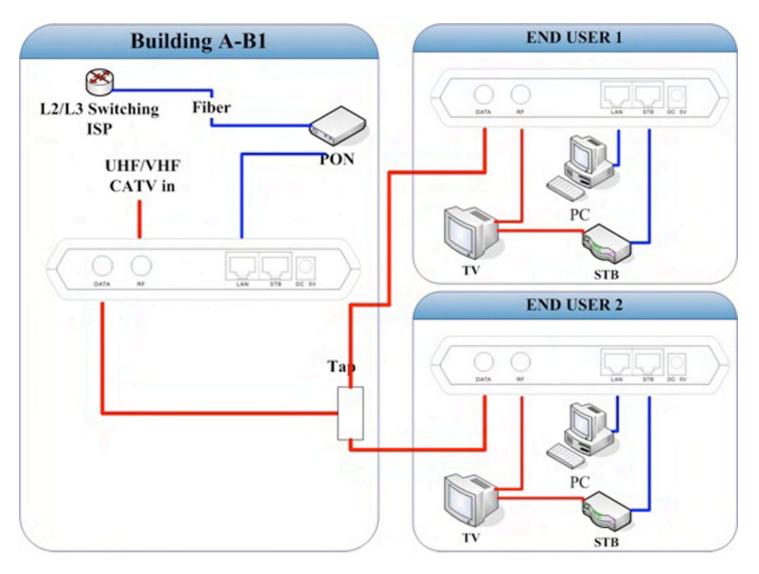
- High-Speed 160Mbps communications link over RG59 Coaxial Cable, Asymmetrical on EoCNA
- 112Mbps@ up to 900 meters(2,952feet), reach down to 32Mbps @ about 1.2Km(4,000feet)
- Operates transparent to high layer protocols such as TCP/IP
- Auto-MDIX and Auto-sensing 10Base-T or 100Base-TX and Full or Half-Duplex on the Ethernet port
- Plug and Play design for simple installation, single switch config
- Status LEDs for simple monitoring of the device and connection status

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Applications

- Extend LAN connectivity to a remote site or between buildings
- Connect Ethernet over the different Room over existing house's Coaxial infrastructure
- Connect new controller technology on the factory floor using existing wiring
- Extend Ethernet connectivity from a backbone network to an isolated location via Coaxial wire
- Transmit Video and traffic controller information over existing Coaxial wire



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Technical Specifications

Network Standards

- ITU G.9954 , Ethernet Over Coaxial Network (EoCNA)
- IEEE802.3 10BASE-T, 10Mbit/s
- IEEE802.3u 100BASE-TX, Fast Ethernet at 100Mbit/s, Auto-negoatiaton
- IEEE802.3x Full Duplex and Flow Control
- IEEE802.1Q port-base VLANs and/or 802.1Q tag-based VLANs
- IEEE802.1p Multi-Priority assignment, Defferential queue weight, Port-based and queue-based rate limitation
- Multicast Applications: Support IGMPv1/v2 snooping.
- Port Rate limit function
- Protocol:
 - Transparent to higher layer protocols
- Connectors
 - Fast Ethernet : Two RJ45 Connectors
 - Coax: Two F-Type Female Coax Connectors, One for EoCNA, the other for TV

• Transmission Power and Spectrum

- 8 +/-1 dBm
- 12-28 MHZ

• Transmission Speed and Distance

- Up to 112Mbps@900 meters
- Up to 4000 Feet (-176dBm/Hz Noise Floor)

• Fast Ethernet Interface

- 10/100 Mbps
- MDI/MDI-X Auto Crossover

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- Quality of Service
 - Priority Base on IEEE802.1p and TCP/UDP port
 - Guaranteed QoS base on Layer II Parameterized QoS

Network Management

- Diagnosis of EoCNA function
- Secured/Isolated Communication between DEVs
- Provision/Denial of Service
- Indicators
 - "Power" LED
 - EoCNA Link/Act , SyncMode LED
 - LAN Link/Act LED, STB Link/Act LED

• Environmental Conditions

- Operating Temperature $: 0^{\circ}C \sim 50^{\circ}C (32^{\circ}F \sim 122^{\circ}F)$
- Storage Temperature : -10° C ~ 65° C (14° F ~ 149° F)
- Operating Humidity : 10% ~ 90% , Non-condensing

• Power Requirement

- External Power Supply : 5V DC
- Power Consumption : < 6 Watts

Physical Dimension

- 155mm(W) x 83mm(D) x 30mm(H)
- Unit Weight
 - 330 g
- Emissions Compliance
 - FCC part 15 Class B, CE Mark

Ordering Information

EL-006M : Master of MDU/MTU

EL-006T : Target of MDU/MTU

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