CTC Union Technologies Co., Ltd.
Far Eastern Vienna Technology Center
(Neihu Technology Park)
8F, No. 60, Zhouzi St. Neihu, Taipei 114,
Taiwan

T +886-2-26591021
F +886-2-26590237
E sales@ctcu.com
info@ctcu.com
marketing@ctcu.com
H www.ctcu.com

CTC union

PRODUCT
Quick Start Guide

Ethernet Over Coaxical Cable

Quick Start Guide

8/2008

Ver. 1.0

Table of Contents

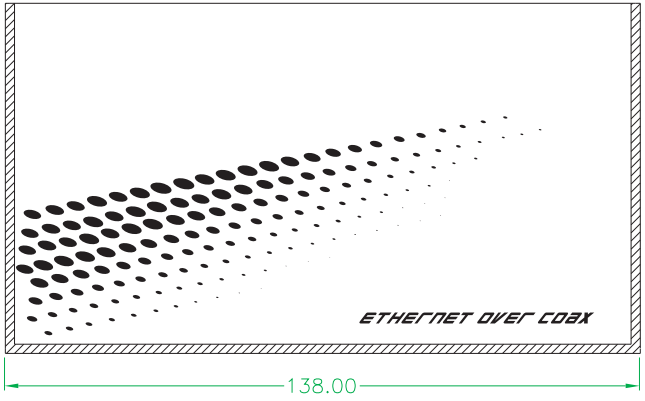
Installation Instructions
EOC-10 Non-Managed Stand-Alone
Ethernet Extender over Coaxial Cable

Introduction

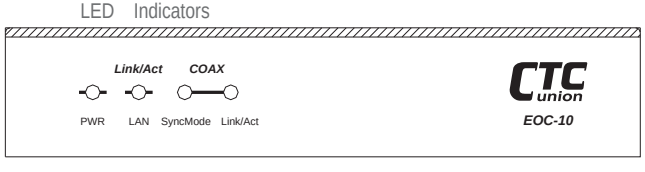
The EOC-10 is point-to-point EoCNA (Ethernet over Coax Network) solution that efficiently extends 10/100 Ethernet circuits to over 800 meters (2,624feet) at up to160Mbps using existing coaxial cable. The EOC-10 will allow Ethernet connectivity in existing facilities without pulling extra cable. This is perfect solution for home Ethernet or anywhere coaxial cable already exists. Installation is easy, just connect a coaxial cable between the “trunk” connections of two EOC-10. The EOC-10 uses coaxial cable to extend Ethernet connectivity over existing CCD/CATV cable.

Features

- High-Speed 160Mbps communications link over existing Coaxial Cable, Symmetrical on EoCNA.
- 160Mbps@ up to 800 meters (2,624feet), reach down to 4Mbps@ about 1.2Km (4,000feet).
- Operates transparently to higher layer protocols such as TCP/IP.
- Auto-MDIX and Auto-negotiation 10Base-T or 100Base-TX and Full or Half-Duplex on the Ethernet port.
- Plug and Play design for simple installation, no configuration or switch setting.
- Status LEDs for simple monitoring of the device and connection status.



Front Panel of EOC-10



Rear Panel of EOC-10

Specifications

- Network Standards
  - ITU G.9954，Ethernet Over Coaxial Network (EoCNA)
  - IEEE802.3 10BASE-T, 10Mbit/s
  - IEEE802.3u 100BASE-TX, 100Mbit/s, Auto-negotiation
  - IEEE802.3x Full Duplex and Flow Control

- Protocol:
  - Transparent to higher layer protocols

- Connectors
  - Fast Ethernet：One RJ45 Connector
  - Coax：Two F-Type Female Coax Connectors,
  - One for EoCNA, the other for TV

- Transmission Power and Spectrum
  - 0 +/-0.5 dBm
  - 12-28 MHZ

- Transmission Speed and Distance
  - Up to 160Mbps@800 meters
  - Up to 4000 Feet (-176dBm/Hz Noise Floor)

- Fast Ethernet Interface
  - 10/100 Mbps
  - MDI/MDI-X Auto Crossover
  - Priority Base on IEEE802.1p and TCP/UDP port

Specifications (continued)

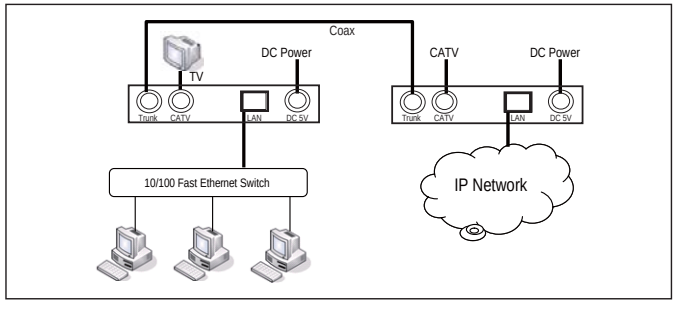
- Indicators
  - "Power" LED
  - EoCNA Link/Act, SyncMode LED
  - LAN Link/Act LED
- Environmental Conditions
  - Operating Temperature: 0°C ~ 55°C (32°F~ 131°F)
  - Storage Temperature: -10°C ~ 65°C (14°F~ 149°F)
  - Operating Humidity: 10% ~ 90% Non-condensing
- Power Requirement
  - External Power Supply: 5V DC
  - Power Consumption: < 3.25 Watts
- Physical Dimension
  - 155mm(W) x 83mm(D) x 30mm(H)
  - Unit Weight: 300g
- Emissions Compliance
  - FCC part 15 Class B, CE EN55022/EN55024

Installation

Connect the Ethernet cable to RJ-45 LAN port. Follow the connection examples below. Install the EOC modem with the DC power adapter provided (+5VDC) and connect the adapter to an AC outlet. The EOC-10 modem will sense whether to operate in Half Duplex mode and Link status will be indicated on the LED.

Connection

The following example illustrates the connection scheme when connecting a remote LAN to the central IP network via coaxial cable.



Application Notes

- Extend LAN connectivity to a remote site or between buildings.
- Connect Ethernet in different rooms over existing home coaxial infrastructure.
- Connect new controller technology on the factory floor using existing coaxial cable.
- Extend Ethernet connectivity from a backbone network to an isolated location via coaxial cable.
- Transmit video and traffic controller information over existing coaxial cable.

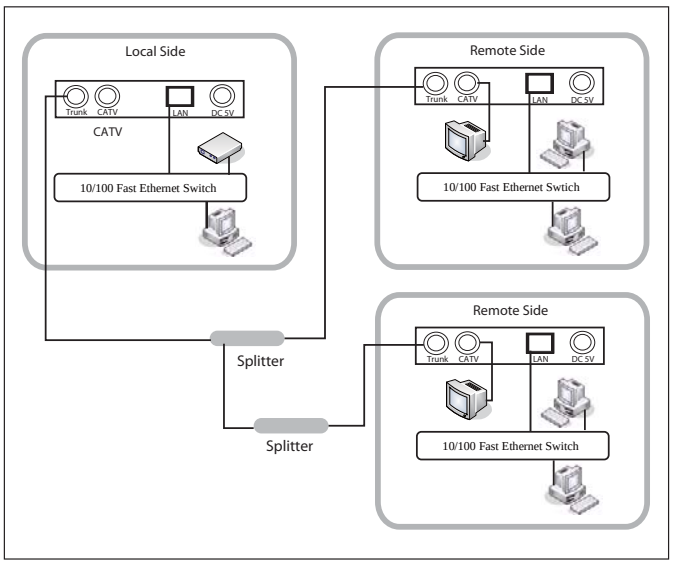


Figure: EOC-10 Application

CE NOTICE

Marking by the symbol CE indicates compliance of this equipment to the EMC directive of the European Community.
Such marking is indicative that this equipment meets or exceeds the following technical standards:
EN 55022:1994/A1:1995/A2:1997 Class A and EN61000-3-2:1995, EN61000-3-3:1995 and EN50082-1:1997