EVC-3001

Ethernet over VDSL2 Converter

- 1*10/100Tx + 1*VDSL2 RJ11, 1*Phone-17a

Features

- Compact design VDSL2 Profile 17a CO / CPE bridge solution
- 1*10/100Tx Fast Ethernet Port
- 2*RJ-11 Ports for 1*VDSL connection and 1*POTS connection
- Supports voice and data transmission simultaneously
- VDSL2 Standalone transceiver for simple bridge modem application
- All-in-One design, Master / Slave selectable via DIP Switch
- Defines Asymmetric (Plan 998) band and Symmetric (Plan 997) band plans for transmission of Upstream and Downstream signals
- DMT (Discrete Multi-Tone) line coding
- Selectable Target Band Plan and Target SNR Margin
- Supports up to 1536 bytes packet size, 802.1Q VLAN tag transparent
- Support extensive LED indicators for network diagnostics
- Co-work with Antaira Media Chassis (FCU-RACK16 series)
- 2 year Warranty

Overview

Implementing EVC-3001 with Existing Telephone copper wires

Antaira new EVC-3001 is a Long Reach Ethernet (LRE) converter provides 1*10/100BTx Ethernet Port and 2*RJ11 phone jacks, in which 1*RJ11 jack is for VDSL connection and another one is for POTS (Plan Old Telephone Service) connection. The EVC-3001 built with POTS splitter to share the existing phone line with POTS, there is no requirement of replacing any existing copper wiring. The EVC-3001 provides 100/55Mbps symmetric data transmission supporting many multi-media services to work on the local Internet, such as VOD (Video on Demand), Voice over IP, Video phone, IPTV, Internet caching server, distance education, and so on. The EVC-3001 comes with 2 selectable modes by adjusting the built-in DIP switch, one is used at client side (CPE), and the other one is at central side (CO) as point-to-point connection application.

Applications

MTU / MDU / Hospitality Solution

The EVC-3001 allows users easy to apply Multi-Unit Buildings applications, such as residential buildings (MDU-multi-dwelling units), commercial buildings (MTU-multi-tenant units), hotels, campus, or hospitals. By utilizing the existing telephony infrastructure, network installation is straightforward and requires no new wiring.

Last Mile of FTTx deployment

The EVC-3001 supports FTTx (Fiber to Building, Fiber to the Campus or Fiber to the Node) applications with high bandwidth VDSL2 over existing telephone wires in the “last mile” from the ISP / Telecom / Service provider’s fiber node to the buildings. The EVC-3001 can be directly connected to a PC or to Ethernet devices such as Ethernet Switches or Broadband Routers. It is excellent solution to allow users to use the existing phone line to transmit data through the Internet and the whole building to share the Internet to the wider area network at a minimum cost.

Specifications

Hardware Specifications	
Ports	10/100Base-TX: 1*RJ-45, Auto-negotiation and Auto-MDI / MDI-X VDSL: 1*RJ-11, female Phone Jack PHONE: 1*RJ-11, Built-in splitters for POTS connection
DIP Switch	4 Position DIP Switch
Functionality	• CO / CPE mode select • Selectable fast and interleaved mode • Selectable target band plan • Selectable target SNR mode
LED Indicators	• One Power • 3 for RJ-11 / VDSL2 WAN : - Green, LNK / ACT - Green, CO mode - Green, CPE mode • 2 for per RJ-45 10/100Base-TX port - Green, LNK / ACT - Green, Speed
Cabling	• 10Base-T: 2-pair UTP Cat.3,4,5 up to 100m (328ft) • 100Base-TX: 2-pair UTP Cat.5, up to 100m (328ft) • VDSL: twisted-pair telephone wires (AWG24 or better) up to 1.6km
Protocol	
Compliance	IEEE 802.3 10Base-T IEEE 802.3u 100Base-TX
Encoding	• VDSL-DMT - ITU-T G.993.1 VDSL - ITU-T G.997.1 - ITU-T G.993.2 VDSL2 (Profile 17a Support)

Performance		
	Asymmetric	**Symmetric**
Full VDSL2 bandwidth up to: (Down Stream / Up Stream)	- 200m -> 100/55Mbps - 400m -> 90/50Mbps - 600m -> 70/40Mbps - 800m -> 60/25Mbps - 1000m -> 45/15Mbps - 1200m -> 35/10Mbps - 1400m -> 30/6Mbps - 1600m -> 25/4Mbps	- 200m -> 90/90Mbps - 400m -> 90/90Mbps - 600m -> 70/70Mbps - 800m -> 55/50Mbps - 1000m -> 40/35Mbps - 1200m -> 30/25Mbps - 1400m -> 25/20Mbps - 1600m -> 20/15Mbps

Power Requirements	
Input Voltage	5VDC 2A
Mechanical Characteristics	
Dimensions	97 x 69 x 26 mm
Weight	0.4 kg
Environmental Limits	
Operating Temperature	0~50 degrees C
Storage Temperature	-25~70 degrees C
Operating Humidity	10~90%, relative humidity, non-condensing
Storage Humidity	10~90%, relative humidity, non-condensing
Regulatory Approvals	
Compliance	FCC Part 15 Class A, CE
Free Fall	IEC60068-2-32
Shock	IEC60068-2-27
Vibration	IEC60068-2-6
Warranty	2 Years

Ordering Information

EVC-3001	Ethernet over VDSL2 Converter - with 1*RJ-45, 1*VDSL2 / RJ-11, 1*Phone-17a

Relative Models

EVC-3010	Ethernet over Coaxial Converter - with 1*RJ-45, 1*BNC-17a
IVC-4011-T	5-Port Industrial Ethernet Extender over VDSL2 - with 4*10/100Tx + 1*RJ11 or BNC

Optional Models

FCU-RACK16S	19” Rackmount 16-Slot Lite Universal Media Converter Chassis, 110/240VAC
FCU-RACK16-AC	19” Rackmount 16-Slot Universal Media Converter Chassis, w/1*AC Power Module
FCU-RACK-AC-PWR	Additional Redundant AC Power Module for FCU-RACK-16-AC
FCU-RACK16-DC	19” Rackmount 16-Slot Universal Media Converter Chassis, w/1*DC Power Module
FCU-RACK-DC-PWR	Additional Redundant AC Power Module for FCU-RACK-16-DC