### RP-VC102EM

#### **Ethernet over VDSL2 Converter**

RP-VC102EM is a VDSL2 LAN Extender providing a broadband transmission up to 100/100Mbps for downstream/upstream over single pair copper line for point-to-point Ethernet connectivity. With 100/100Mbps data rate, RP-VC102EM supports transmission distance up



to 300 meters and less data rate for 2km long range connection. Users may also select a fixed data rate or a fixed SNR margin for different copper line ranging.

The converter is plug-n-play without the need to configure software, and it is fully compliant with all kinds of network protocols. Moreover, the rich diagnostic LEDs on the front-panel provide the operating status of the system.

RP-VC102EM supports the signal conversion between traditional Ethernet and innovative VDSL technology. It is ideal for providing video-on-demand and multi-media service to apartment, hotel and campus without rewiring cable consideration. Moreover, the distance expansion also provides wide range coverage. The device is a right solution to integrate current Ethernet application with the new building phone line networking technology, like hotel, office and apartment environment.

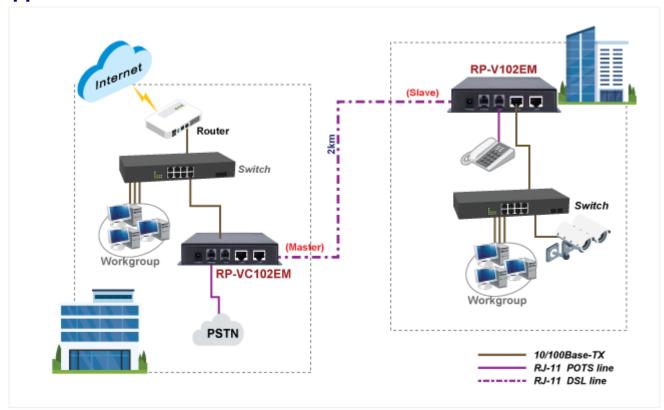
### **Features**

- Compliant with ITU-T G.993.1, G.993.2 VDSL2 Standard
- VDSL2 Profiles: 8a/b/c/d, 12a/b, 17a, 30a
- Band Plan 997 and 998 supported
- Supports Back-to-back applications
- Annex A, Annex B, Annex C supported
- US0 Supported
- OLR Supported
- Compliant with VDSL2 MIB
- Ethernet packets over VDSL2
- 100/100Mbps DownStream/ UpStream for distance up to 300 meters
- Trellis Coding support up to 1024 Discrete Multi-Tone (DMT) bin
- Supports DSL connection up to 2000 meters
- Selectable Fast and Interleaved modes
- Selectable fixed data rate and fixed SNR margin
- Auto MDIX for 10/100 BaseT Ethernet LAN Ports
- 4 Dip Switches for Master/Slave Configurations
- Low-Latency for Video/Voice/Data applications

# **Specifications**

Standard	<ul> <li>IEEE802.3 standard</li> <li>IEEE802.3u standard</li> <li>Ethernet over VDSL2</li> </ul>
	• ITU-T G.993.1, G.993.2 VDSL2
	• 2 x RJ-45 10/100Mbps Ethernet ports
Interface	1 x RJ-11 connector for EoVDSL2
	1 x RJ-11 connector for POTS telephone connection
	DIP switch for mode selection
Network Media	RJ-45 (Ethernet): Category 3, 4, 5 UTP/STP
	RJ-11 (EoVDSL2): Twisted-Pair phone wire
	ITU-T G.993.1/2, SG15Q4 DMT Compliance
VDSL Transmission	Trellis Code with 1024 DMT bins
	Max Data Rate: 100/100 Mbps
	RJ-11 Connector
POTS	<ul> <li>Optional Annex A, B, or C</li> </ul>
	RJ-11 Connector
LAN	<ul> <li>Auto-Detection for 10/100 BaseT and Half/Full duplex</li> </ul>
	High performance bridge for Ethernet extension
	Fully compatible with IEEE802.3/IEEE802.3u
	Automatic MDIX Function
	RJ-45 Connector
LED indicators	Power, DSL, LAN1, LAN2,     M/Q/Master/Oless Octobritism
Danier Committee	M/S(Master/Slave Selection )  Future of Bourse Adapton BO40V
Power Supply	External Power Adapter DC12V  On a ratio a Tamp a rational O'C F0'C  On a ratio a Tamp a rational O'C F0'C
Environment	Operating Temperature: 0°C~ 50°C     Operating Humidity: 5°/, 05°/, (Non Condensing)
Dimension	<ul><li>Operating Humidity: 5%~95% (Non-Condensing)</li><li>120 * 90 * 28 mm</li></ul>
Certifications	• 120 ^ 90 ^ 28 mm • CE, FCC
Certifications	Performance in AWG 26 Line at 6dB without rate limit
Data Rate & Distance	Down Stream Up Stream Distance
	Data Rate (Mbps) Data Rate (Mbps) (feet)
	100 100 1000
	100 60 1200
	90 44 1350
	80 36 1500
	70 27 1750
	60 18 2000
	48 11 2500
	39 8 3000
	35 3.5 3500
	28 0.3 4000

## **Application**



## **Ordering information**

**RP-VC102EM** Ethernet over VDSL2 Converter