RP-VC102EM
Ethernet over VDSL2 Converter

RP-VC102EM VDSL2 LAN Extender offers fast and reliable broadband transmission for point-to-point Ethernet connectivity. With downstream/upstream speeds of up to 100/100Mbps, it provides high-performance data transfer over a single pair copper line. The extender supports a transmission distance of up to 300 meters at 100/100Mbps and longer distances at reduced data rates for 2km connections.

Enjoy the convenience of plug-n-play installation with the RP-VC102EM. No software configuration is required, making it easy to set up. It is fully compliant with various network protocols, ensuring compatibility with different systems. The front-panel diagnostic LEDs provide real-time status updates of the system.

Ideal for delivering video-on-demand and multimedia services, the RP-VC102EM converts signals between traditional Ethernet and innovative VDSL technology. It eliminates the need for rewiring cables, making it a suitable solution for apartments, hotels, and campuses. The extender expands network coverage and integrates new building phone line networking technology with existing Ethernet applications, making it ideal for hotel, office, and apartment environments.

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
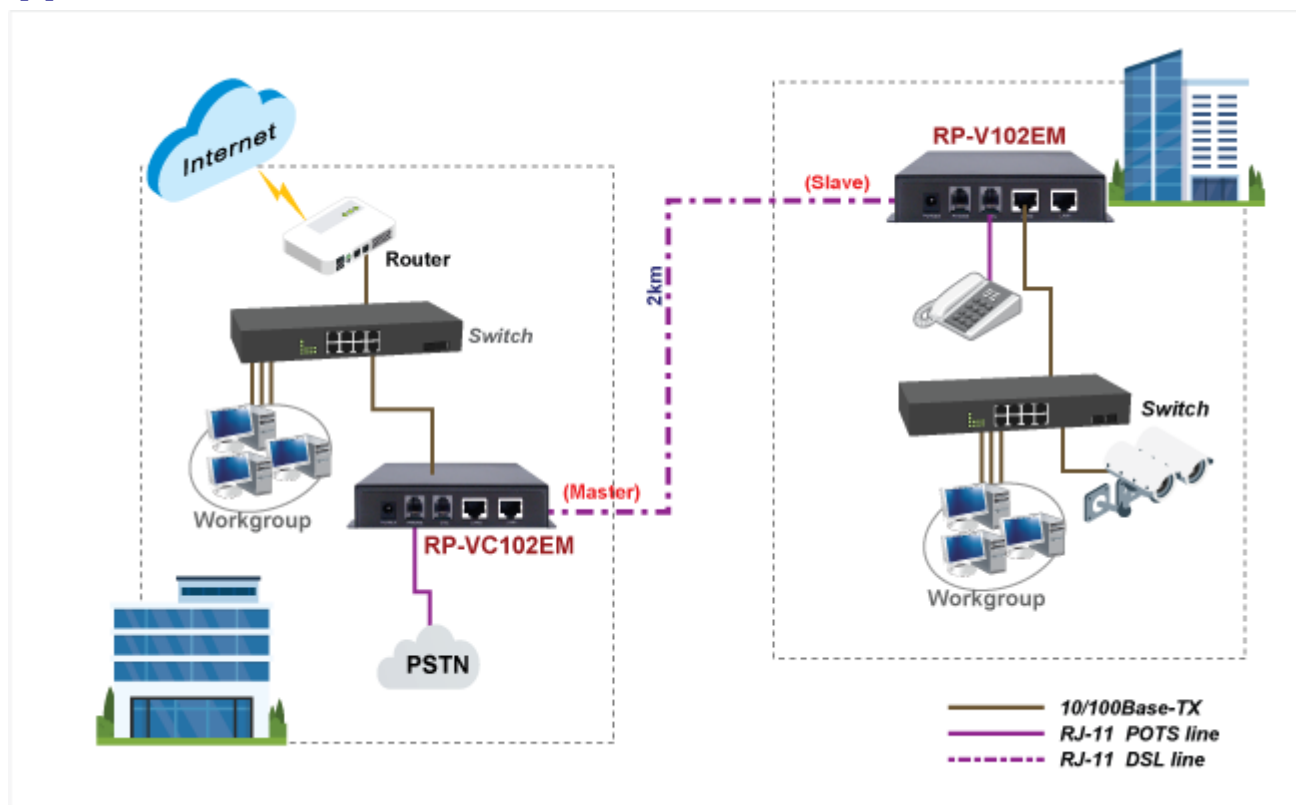- Low-Latency for Video/Voice/Data applications

Specifications

Standard	- IEEE802.3 standard - IEEE802.3u standard - Ethernet over VDSL2 - ITU-T G.993.1, G.993.2 VDSL2
Interface	2 x RJ-45 10/100Mbps Ethernet ports 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
VDSL Transmission	- ITU-T G.993.1/2, SG15Q4 DMT Compliance - Trellis Code with 1024 DMT bins - Max Data Rate: 100/100 Mbps - RJ-11 Connector
POTS	- Optional Annex A, B, or C - RJ-11 Connector
LAN	- Auto-Detection for 10/100 BaseT and Half/Full duplex - 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/S(Master/Slave Selection)
Power Supply	External Power Adapter DC12V
Environment	- Operating Temperature: 0°C~ 50°C - Operating Humidity: 5%~95% (Non-Condensing)
Dimension	120 * 90 * 28 mm
Certifications	CE, FCC

Data Rate & Distance	● Performance in AWG 26 Line at 6dB without rate limit		
	Down Stream Data Rate (Mbps)	Up Stream Data Rate (Mbps)	Distance (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

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