

# V101 / V101-BNC

## 100/60Mbps VDSL LAN Extender



V101 Series is a VDSL LAN Extender providing a broadband transmission up to 100/60Mbps for downstream/upstream over single pair copper line or coaxial cable for point-to-point Ethernet connectivity. With 100/60Mbps data rate, V101 Series supports transmission distance up to 300 meters and 30/10 Mbps for 1km long range connection. Users may also select a fixed data rate or a fixed SNR margin for different copper line ranging.

With plug and play features and minimum installation time, a pair of V101 Series offers a cost effective solution for bandwidth-hungry applications such as video streaming and FTTB over single twisted pair telephone line or coaxial cable.

### Features:

- ITU-T G.993.1, G.993.2 VDSL/VDSL2 and SG15Q4 DMT Compliance
- 100/60Mbps DownStream/UpStream for distance up to 300 meters
- Trellis Coding support up to 1024 Discrete Multi-Tone (DMT) bin
- Supports VDSL connection up to 2000 meter
- 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

## Technical Specifications:

### VDSL Transmission:

- ITU-T G.993.1/2, SG15Q4 DMT Compliance
- Trellis Code with 1024 DMT bins
- Max Data Rate: 100/60 Mbps
- RJ-11 Connector x 1(For V101 Model)
- BNC Connector x1(For V101-BNC Model)

### POTS Interface (For V101 Model):

- Optional Annex A, B, or C
- RJ-11 Connector x 1

### LAN Interface:

- 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 x 1

### LED Indicators:

- POWER: Power is ON.
- DSL: VDSL Loop Connection Status
- LAN: Data Activity of LAN Port.

### Physical Dimension:

Desktop: 120 x 90 x 28 (mm)

### Power:

5VDC 2A

### Operating Environment:

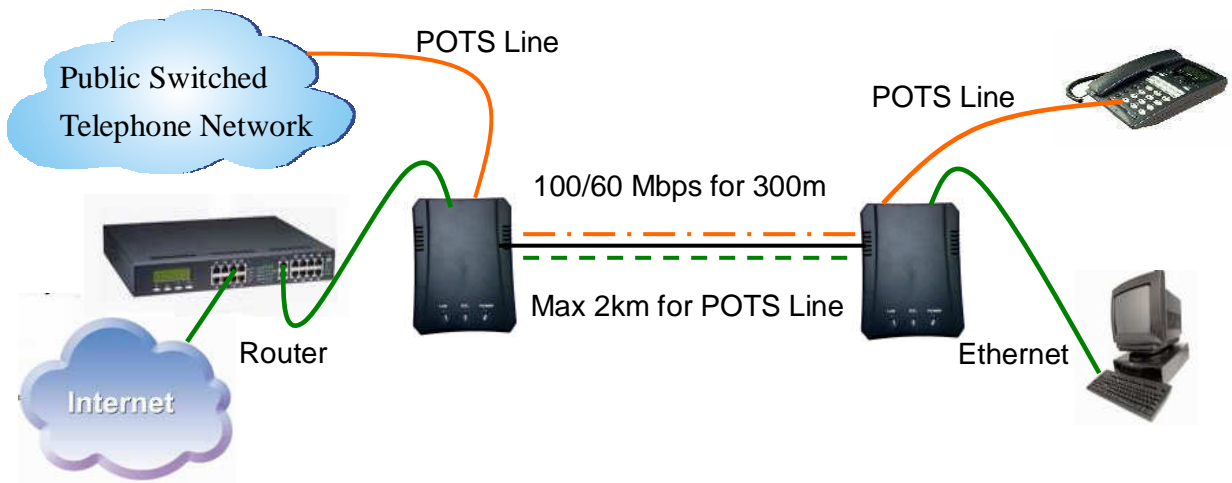
- Humidity: 5% to 95% non-condensing
- Temperature: 0 ~ 50 degree C

### Regulatory Compliance:

- FCC Rules Part 15
- CE

## Application Diagrams:

### LAN-to-LAN Extension over POTS Line



### LAN-to-LAN Extension over Coaxial Cable



## 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	60	500
98	53	1000
90	44	1250
80	36	1500
70	27	1750
60	18	2000
48	11	2500
39	8	3000
35	3.5	3500
28	0.3	4000

### Performance in 5C2V Cable at 6dB without rate limit

Down Stream Data Rate (Mbps)	Up Stream Data Rate (Mbps)	Distance (feet)
100	60	500
100	58	1000
100	56	1250
98	53	1500
96	50	1750
88	48	2000
80	44	2500
75	35	3000
70	30	3500
63	25	4000