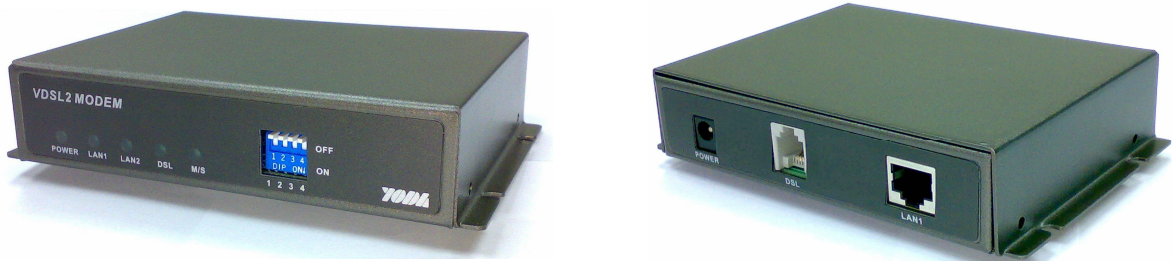


V102-PSE

100/60Mbps VDSL PoE LAN Extender



V102-PSE is a VDSL LAN Extender providing a broadband transmission up to 100/60Mbps for downstream/upstream over single pair of copper line for point-to-point Ethernet connectivity. With 100/60Mbps data rate, V102 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 Power over Ethernet (PoE) feature, V102-PSE **provides** power supply over Ethernet cable to Ethernet PD device with voltage in the range from 44 to 57Volt.

With plug and play features and minimum installation time, a pair of V102 Series offers a cost effective solution for bandwidth-hungry applications such as video streaming and FTTB over single twisted pair telephone line.

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 DSL 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
- IEEE 802.3af PSE Compliant for Class 0-3.
- 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

LAN Interface:

- Auto-Detection for 10/100 BaseT and Half/Full duplex
- Fully compatible with IEEE802.3/IEEE802.3u
- Automatic MDIX Function
- IEEE 802.3af PSE Compliant
- RJ-45 Connector x 1

PSE:

- IEEE 802.3af Compliant with output voltage within 44 – 57Volt
- Safety-Extra-Low-Voltage (SELV) Compliant
- Maximum 15.4W Power Levels for Class 0-3
- Power Auto Restart with Under Voltage Lockout (UVLO) Fault Detection

LED Indicators:

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

Physical Dimension:

Desktop: 120 x 90 x 28 (mm)

Power:

12VDC 2.5A

Operating Environment:

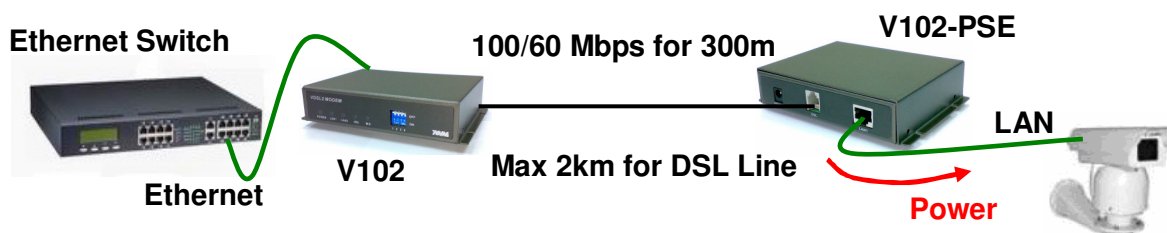
- Humidity: 5% to 95% non-condensing
- Temperature: 0 ~ 50 degree C

Regulatory Compliance:

- FCC Rules Part 15
- CE

Application Diagram:

LAN-to-LAN PSE Extension over DSL Line



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