

8/9-Port MDU Packet Switching Concentrator



PRODUCT DESCRIPTION

OvisLink -1000A/B/EB system is the Packet Switching Concentrator most suitable for Internet Service Provider's residential gateway application. It is ideal for Multiple Dwelling Unit (MDU) Internet services such as hotel/motel, multi-tenant apartment, multi-tenant commercial, multi-tenant student dorm, campus, and local loop. The **OvisLink -1000A/B/EB** HomePNA packet concentrator utilizes the existing telephone wiring within a building to deliver data at mega-bit speed and does not interrupt regular voice services. Data and voice run simultaneously on the same pair of wire without any re-wiring. The system supports a Concentrator mode, where each of the ports 0-7 is only to directly communicate with the Uplink port #8 (9th Port). This mode ensures that data from any of ports 0-7 cannot be directly seen by another port. This feature is used in applications to provide data privacy to subscribers. **OvisLink -1000A/B/EB** is designed to eliminate unnecessary network traffic, and relieve congestion by delivering dedicated bandwidth for each of the ports. Able to begin operating after power-up, the **OvisLink -1000A/B/EB** will learn addresses automatically, and begin forwarding packets at full wire-speed to any of the eight outputs. The system also comes with future upgradeable capabilities with the expansion

port, an optional up-link 100Base-FX/TX (Internal or External adapter). The system companions with the Management-Lite NMS and provides port based VLANs, and Quality of Service (QoS) via a parallel port that are usually associated only with high-cost fully managed switches. The built-in intelligence of configuration allows it to recognize and offer packet prioritization utilizing Network's QoS. Packets are prioritized based upon their Layer 2 VLAN priority tag or the Layer 3 Type-Of-Service (TOS/DS) field. This priority can be defined as transmit and/or drop priority. **OvisLink -1000A/B/EB** can operate stand-alone or can be cascaded with eight **OvisLink -900TX** up to eight **OvisLink -1000A/B/EB** units to reach as 64+1 port-Switch MDU system. Below is the diagram depicting the typical application by using the **OvisLink -1000A/B/EB**. The **OvisLink -1000A/B/EB** connects any desktop PC or Macintosh equipped with a 10Base-T network interface card (with VX110, 120, 130 combo bridge) or a HomePNA LAN card by simply plugging into any RJ-11 jack. **OvisLink -1000A/B/EB** delivers true splitter-less data over voice and delivers an "always on" Internet connection.

FEATURES

- Eight (8) 1.0 or 1.6 Mbps (Optional) RJ11 (pin 3 and 4) Serial ports direct using home existing phone line – No additional Hubs or cabling
- One (1) Uplink port that can be used as either 10/100TX or 100FX.
- Distance up to 300-350m (VX-1000A/B) and 1.2Km for enhanced version (VX-1000EB) over standard 24 AWG
- Ideal for MDU (Multiple Dwelling Unit) application with Home PNA Networking
- Operates stand-alone or can be cascaded up to 8 **OvisLink -1000A/B/EB** to reach as a 64+1 port system
- Support Mixed voice-data networks
- Full wire-speed layer 2 switch on all ports
- Up to 8 port-based VLANs can be configured in EEPROM
- Internal 1k MAC address table
 - Auto address learning
 - Auto address aging
- Leading edge QoS capabilities provided based on 802.1p and IP TOS/DS field
 - 2 Queues per port
 - Packet scheduling based on Weighted Round-Robin (WRR) and Weighted Random Early Detection/Drop (WRED)
 - Without flow control can drop packets during congestion using WRED
 - 2 levels of packet drop provided
- Support Network bridging function between the HomePNA port(s) and Ethernet Port(s) for the packet data exchange, deliver the data packets from the Ethernet port(s) to the HomePNA port(s)
- Support Concentrator mode that provides data privacy to subscribers, and provides port-based prioritization of packets on up to 4 ports
 - Input ports are defined to be high or low priority
 - Allows explicit identification of IP Phone ports
- Flow control capabilities
 - Provides back pressure for half-duplex
 - 802.3x flow control for full-duplex
- A parallel port for configuration updates
- Special power saving mode for inactive ports
- Transmit delay control capabilities and maximum delay guarantee (<1ms)
- DIP select for High/Low speed option
- Support System Watch dog function

SYSTEM

Power Supply Indicators	90 / 220 VAC, 47 to 65Hz One Activity LED, one Link LED and one Collision LED
Dimension	1U Rack-Mount/Wall-mount 17"(W) x 7.5"(D) x 1.7"(H)
Temperature	0 to 50°C (Standard) 0 to 60°C (High temperature option)
Humidity	5% to 95% non-condensing
Altitude	-200ft. to +15,000ft
Weight	< 40LBs
Reliability	MTBF 262,425 hrs minimum

Note:

- **-1000A** is 1.0Mbps with distance 300m over a standard 24 AWG.
- **-1000B** is 1.4Mbps with distance 350m over a standard 24 AWG.
- **-1000EB** is 1.4Mbps with distance 1.2Km over a standard 24 AWG.