

## Modem TS-101 G.SHDSL ETH



### Product Description

#### 1. Features

- Easy configuration and management with password control for various application environments
- Efficient IP routing and transparent learning bridge to support broadband Internet services
- VPN pass-through for safeguarded connections
- DMZ host/MultiDMZ/MultiNAT enables multiple workstations on the LAN to access the Internet for the cost of IP address
- Fully ATM protocol stack implementation over SHDSL
- PPPoA and PPPoE support user authentication with PAP/CHAP/MS-CHAP
- SNMP management with SNMPv1/SNMPv2 agent and MIB II
- Getting enhancements and new features via Internet software upgrade

#### 2. Overview

**TS-101 G.SHDSL ETH** (Single Paired High Speed Digital Subscriber Loop) router complies with G.991.2 standard with 10/100 BaseT autonegotiation. It provides businessclass, multirange form 64kbps to 2.304Mbps payload rates over exiting singlepair copper wire. SHDSL routers are designed not only to optimize the service bit rate from central office to customer premises also it integrates highend Bridging/Routing capabilites with advanced functions of MultiDMZ, virtual server mapping and VPN pass-through.

The SHDSL router allows customers to leverage the latest in broadband technologies to meet their growing data communication needs. Through the power of SHDSL products, you can access superior manageability and reliability.

#### 3. Function

##### Routing

- Support IP/TCP/UDP/ARP/ICMP/IGMP protocols
- IP routing with static routing and RIPv1/RIPv2 (RFC1058/2453)
- IP multicast and IGMP proxy (RFC1112/2236)
- Network address translation (NAT/PAT) (RFC1631)
- NAT ALGs for ICQ/Netmeeting/MSN/Yahoo Messenger
- DNS relay and caching (RFC1034/1035)
- DHCP server, client and relay (RFC2131/2132)

##### Bridging

- IEEE 802.1D Transparent Bridging

##### Security

- DMZ host/Multi-DMZ/Multi-NAT function
- Virtual server mapping (RFC1631)
- VPN pass-through for PPTP/L2TP/IPSec tunneling
- Natural NAT firewall

## Management

- Easy-to-use web-based GUI/DIP4 for quick setup, configuration and management
- Menu-driven interface/Command-line interface (CLI) for local console and Telnet access
- Password protected management and access control list for administration
- SNMP management with SNMPv1/SNMPv2c (RFC1157/1901/1905) agent and MIB II (RFC1213/1493)
- Software upgrade via web-browser/TFTP server

## ATM

- Up to 8 PVCs
- OAM F5 AIS/RDI and loopback
- AAL5

## ATM QoS

- UBR (Unspecified Bit Rate)
- CBR (Constant Bit Rate)
- VBR-rt (Variable Bit Rate Real Time)
- VBR-nrt (Variable Bit Rate Non-real Time)

## AAL5 Encapsulation

- VC multiplexing and SNAP/LLC
- Ethernet over ATM (RFC 2684/1483)
- PPP over ATM (RFC 2364)
- Classical IP over ATM (RFC 1577)

## PPP

- PPP over Ethernet for fixed and dynamic IP (RFC 2516)
- PPP over ATM for fixed and dynamic IP (RFC 2364)
- User authentication with PAP/CHAP/MS-CHAP

## WAN Interface

- SHDSL: ITU-T G.991.2 (Annex A, Annex B)
- Encoding scheme: 16-TCPAM
- Data Rate: N x 64Kbps (N=0~36, 0 for adaptive)
- Impedance: 135 ohms

## LAN Interface

- 10 Base-T and 100 Base-T auto-negotiation

## Hardware Interface

- WAN: RJ-11
- LAN: RJ-45
- DIP : 4PIN DIP for Rate Setup
- RST: Reset Button for Factory Default

## Indicators

- General: PWR
- WAN: LINK, ACT
- LAN: 10/100M/ACT, CPE , ALM

## Physical/Electrical

- Dimensions: 19.7 x 3.7 x 13.3m (WxHxD)
- Power: 100~240VAC
- Power consumption: 5 watts max
- Temperature: 0~45°C
- Humidity: 0%~95% RH (non-condensing)

## Memory

2MB Flash Memory, 8MB SDRAM