# 4-wire SHDSL Router with 4-port Switching HUB

SHDTU03A-ET10RS SHDTU03AF-ET10RS (with Firewall Feature)

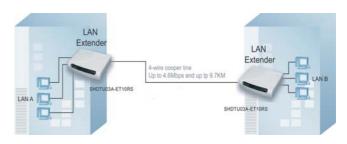


The SHDTU03A is a G.SHDSL (Single-Paired High Speed Digital Subscriber Loop) 4-wire router which complies with G.991.2 standards and with optional feature of a built-in four port 10Base-T /100Base-TX auto-negotiation and auto-MDIX switching HUB to meet enterprise and SOHO needs. The SHDTU03A family provides business-class, multi-range 64Kbps to 4.608Mbps payload rates over exiting two pairs copper wire. The SHDTU03A SHDSL router is designed not only to optimize the service bit rate from central office to customer premises but also integrates high-end Bridging/ Routing capabilities with advanced functions such as Multi-DMZ, virtual server mapping and VPN pass-through. In bridge mode, the four ports 10Base-T/100Base-T auto-negotiation and auto-MDIX switching ports may be configured for IEEE802.1q VLAN or port based VLAN application. The SHDTU03/ET10RS allows customers to leverage the latest in broadband technologies to meet their growing data communication needs. Through the power of our G.SHDSL products, you can access superior manageability and reliability.

## **Features**

- Standard G.SHDSL (ITU G.991.2) support for improved reach/speed and greater interoperability
- Use existing copper loop infrastructures
- Can operate in back to back configurations
- Efficient two pairs wire usage
- Up to 4.608Mbps symetrical service bit rate
- Adaptive rate installation maximizes data rate based on loop conditions
- Management interface via web browser
- SHDSL Line performance monitoring
- Raw and time stamped statistics
- Bandwidth guarantee transmission equipment

## Application



# **Specifications**

#### Routing

- Support TCP/ IP/ UDP/ ARP/ICMP/IGMP protocols
- IP routing with static routing and RIPv1 & RIPv2 (RFC1058/2453)
- IP multi-cast and IGMP proxy (RFC1113/2236)
- Network address translation and port address translation (NAT/PAT) (RFC1631)
- NAT/ ALG (Application Layer Gateway) for ICQ/Netmeeting/MSN/Yahoo Messenger
- DNS relay and caching (RFC1034/1035)
- DHCP server (RFC2131/2132)
- IP precedence (RFC 791) (for Firewall Router)

### **Bridging**

- IEEE 802.1D transparent learning bridge
- Port-based VLAN (for ET10RS model)

#### Security

- DMZ host/ Multi-DMZ/ Multi-NAT functions
- Virtual server mapping (RFC1631)
- VPN server pass-through for PPTP/L2TP/IPSec tunneling
- Natural NAT firewall
- Advanced Stateful packet inspection (SPI) firewall (for Firewall Router)
- Application level gateway for URL and keyword blocking (for Firewall Router)
- User access control: deny certain access of PCs to Internet (for Firewall Router)

#### **Indicators**

- General: Power
- G.SHDSL: Link, Active
- Ethernet: 1, 2, 3, 4, Alarm

# **Physical/ Electrical**

- Dimensions:  $18.7 \times 3.3 \times 14.5 \text{cm}$  (WxHxD)
- Power:100~240VAC (via power adapter)
- Power consumption: 9 watts
- Temperature: 0~45°C

## Memory

■ 2MB Flash Memory, 8MB SDRAM

#### Management

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

#### ATM

- Up to 8 PVCs
- UBR/XBR/VBR-rt/VBR-nrt for QoS
- OAM F5 AIS/RDI and loopback
- AAL5

#### **AAL5 Encapsulation**

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

#### PPP

- PPPover Ethernet (RFC 2516)
- PPP over ATM (RFC 2364)
- User authentication with PAP/CHAP/MS-CHAP

#### **G.SHDSL**

- 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

#### **Ethernet**

- 4-ports switching hub (for ET10RS model)
- 10Base-T and 100Base-TX auto-negotiation
- Auto-MDIX

## **Hardware Interface**

- WAN: RJ-11
- LAN: RJ-45 x 4 (for ET10RS model)
- Console port/ RS232: DB9F

Model No.	SHDTU03-ET10R	SHDTU03F-ET10R	SHDTU03-ET10RS	SHDTU03F-ET10RS	SHDTU03A-ET10RS	SHDTU03AF-ET10RS
WAN	2-Wire	2-Wire	2-Wire	2-Wire	4-Wire	4-Wire
LAN	1	1	4	4	4	4
Auto-MDIX			×	×	×	×
Port-based VLAN		×	×	×	×	×
802.1qVLAN		1 LAN / 8 WANs	4 LAN / 1 WANs	4 LAN / 8 WANs	4 LAN / 1 WANs	4 LAN / 8 WANs
Firewall		×		×		×
IP Precedence		×		×		×
Maximum Data	2.304M	2.304M	2.304M	2.304M	4.608M	4.608M
Rate	64k	64k	64k	64k	128k	128k

x with the specific feature

# **Ordering Information**

- SHDTU03A-ET10RS
- Standalone 4-wire SHDSL router with 4-port switching HUB
- SHDTU03AF-ET10RS Standalone 4-wire SHDSL router with firewall protection and 4-port switching HUB