ATM SHDSL Router

2-wire G.SHDSL ATM
SHDTU03F-ET10R, SHDTU03AF-ET10RS
2/4-wire G.SHDSL.bis ATM
SHDTU03bF-ET10RS, SHDTU03bAF-ET10RS

The SHDSL ATM modem series is 2-wire or 4-wire Ethernet Bridge/Router that complies with G.991.2 standards and has an optional built-in four port 10Base-T /100Base-TX auto-negotiation and auto-MDIX switch. The SHDSL ATM modem provides business-class, multi-rate 2-wire up to 5.7Mbps (SHDSL.bis) and 2.3Mbps (SHDSL) or 4-wire 11.4Mbps (SHDSL.bis) and 4.6Mbps (SHDSL) payload rates over existing single or two pair copper wire. SHDSL ATM modem is designed not only to optimize the service bit rate from central office to customer premises but also integrates high-end Bridging/ Routing EFM bonding capabilities with advanced functions such as virtual server mapping and VPN pass-through. The SHDSL ATM modem allows customers to leverage the latest in broadband technologies to meet their growing data communication needs. In bridge mode, the four switching ports may be configured for IEEE802.1Q VLAN or port based VLAN applications. The modem can be configured in either central or client mode providing a point-to-point solution
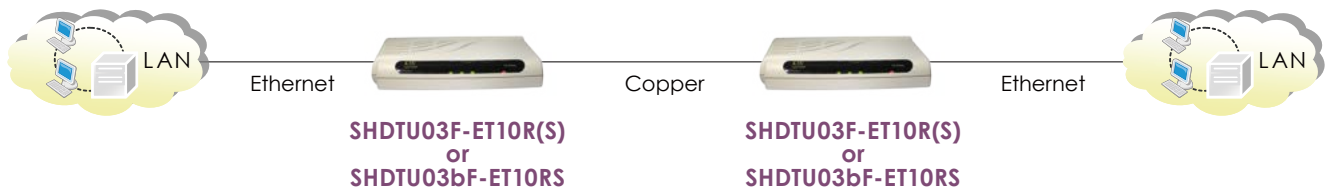
Features

- Supports Ethernet over ATM over SHDSL
- Full ATM protocol stack implementation over G.SHDSL
- Adaptive rate installation maximizes data rate based on loop conditions
- Standard ITU G.991.2 (2004) supports improved reach, speed and interoperability compared to conventional G.SHDSL
- Supports point-to-point configurations
- Local management interface via console port
- Intuitive Web based management
- SNMP management with SNMPv1/v2 and MIB II
- Build-in advanced SPI firewall (Firewall routers)

- Efficient IP routing and transparent learning bridge to support broadband Internet services
- VPN pass-through for safeguarded connections
- DMZ host/Multi-DMZ/Multi-NAT; multiple PCs on a LAN with only one IP address
- PPPoA and PPPoE support user authentication with PAP/CHAP/MSCHAP
- Raw and time stamped statistics
- Supports firmware upgrade via web interface
- EFM (Ethernet in the First Mile) bonding per IEEE 802.3-2005; 2/4-wire bonding for HDLC per G991.2

Specifications

Ports		
	LAN Interface	10Base-T /100 Base-TX auto-negotiation
		Auto-MDIX
		Connector: RJ-45
	WAN Interface	SHDSL: ITU-T G.991.2(Annex A/B) ITU-T G.994.1
		SHDSL.bis: ITU-T G.991.2 2004(Annex A/B/F/G) ITU-T G.994.1
		Encoding scheme: TC-PAM16, TC-PAM32
		Data Rate: N x 64Kbps (N=3~89)
		Impedance: 135 ohm
		Data Rate :
		SHDSL: 2-wire up to 2.3Mbps
		SHDSL.bis: 2-wire up to 5.7Mbps, 4-wire up to 11.4Mbps

ATM	
	Up to 8 PVCs
	OAM F4/F5 loopback test , 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

Indications	
	General: PWR
	WAN: LNK, ACT
	LAN: 1, 2, 3, 4 (ET10RS)
	LAN: Link, ACT (ET10R)
	SHDSL: ALM

Power Input	DC 9V-12V in

Power Consumption	< 9W

Routing	
	Supports 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 MSN/Yahoo Messenger
	DNS relay and caching (RFC1034/1035)
	DHCP server, client and relay (RFC2131/2132)

Bridging	
	IEEE 802.1D Transparent Bridging
	IEEE 802.1Q VLAN
	Port-based VLAN

Security	
	DMZ host/Multi-DMZ/Multi-NAT function
	Virtual server mapping (RFC1631)
	VPN pass-through for PPTP/L2TP/IPSec tunneling
	NAT firewall
	Advanced stateful packet inspection (SPI) firewall
	Denial of service protection
	User access control

Management	
	Easy-to-use web-based GUI for quick setup, configuration and management
	Menu-driven interface for local console and Telnet access
	Password protected management and access control list for administration
	SNMP management with SNMPv1/SNMPv2c (RFC1157/1901/1905), MIB II (RFC1213/1493)
	Software upgrade via web-browser/TFTP server
	Console port: RJ-232

Dimensions	145 x 187 x 33 mm (D x W x H)
Weight	0.58kg
Temperature	0 ~ 50°C (Operating), -10 ~ 70°C (Storage)
Humidity	10 ~ 90% non-condensing
Certification	CE, FCC, RoHS compliant
MTBF	57,000 hrs

Application

SHDTU03F-ET10R(S)
or
SHDTU03bF-ET10RS

SHDTU03F-ET10R(S)
or
SHDTU03bF-ET10RS

Ethernet   Copper   Ethernet

	SHDTU03F-ET10R	SHDTU03F-ET10RS	SHDTU03bF-ET10RS	SHDTU03bAF-ET10RS
WAN	2-wire	2-wire	2-wire	4-wire
LAN	1	4	4	4
Auto-MDIX	Yes	Yes	Yes	Yes
Port-based VLAN	None	Yes	Yes	Yes
802.1Q VLAN	1LAN / 1WAN	4LAN / 1WAN	4LAN / 8WAN	4LAN / 8WAN
Firewall	No	No	Yes	Yes
Maximum data rate	2.3Mbps	2.3Mbps	5.7Mbps	11.4Mbps
Minimum data rate	64Kbps	64Kbps	192Kbps	384Kbps

Ordering Information

2-wire / 4-wire G.SHDSL ATM

Model Name	Description
SHDTU03F-ET10R	1-Port 10/100Base-TX ATM Bridge / Router w/Firewall (2-wire 2.3Mbps)
SHDTU03F-ET10RS	4-Port 10/100Base-TX ATM Bridge / Router w/Firewall (2-wire 2.3Mbps)

2-wire / 4-wire G.SHDSL.bis ATM

Model Name	Description
SHDTU03bF-ET10RS	4-Port 10/100Base-TX ATM Bridge / Router w/Firewall (2-wire 5.7Mbps)
SHDTU03bAF-ET10RS	4-Port 10/100Base-TX ATM Bridge / Router w/Firewall (4-wire 11.4Mbps)

SHDTU03F – ☐☐☐☐☐
Example: SHDTU03F – ET10R

Specifications & design are subject to change without prior notice. Please visit CTC Union website for more details.

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