G.SHDSL.bis ATM EFM Router

SHDTU04bCF-ET10RS

G.SHDSL.bis ATM EFM Router (8wire 22.78Mbps)

The G.SHDSL.bis ATM EFM Router is 2/4/8wires Ethernet Bridge/Router that complies with G.991.2 standards and has an built-in four port 10Base-T /100Base-TX auto-negotiation and auto-MDIX switch. The G.SHDSL.bis ATM EFM Router provides multi-rate 2-wire / 5.7Mbps or 4-wire / 11.4Mbps and 8-wire / 22.78Mbps payload rates over existing single or two pair copper wire. The G.SHDSL.bis ATM EFM Router 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 G.SHDSL.bis ATM EFM Router 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.bis
- 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

Interface	WAN	SHDSL.bis: ITU-T G.991.2 (2004) Annex A/B/F/G
		Support EFM Bonding and SHDSL M-Pair mode
		Line Code: TC-PAM 16/32/64/128
		Data Rate: N × 64 Kpbs (N=3~89) using TC-PAM 16/32 Max. 5.696Mbps (1-Pair) Max. 11.392Mbps (2-Pair) Max. 22.78Mbps (4-Pair) N × 64 Kbps (N=3~239) using TC-PAM 64/128 Max. 15.296 Mbps (1-Pair) Max. 30.592 Mbps (2-Pair) Max. 61.184Mbps (4-Pair)
		Impedance: 135 ohms
	LAN	RJ-45 × 4-Ports 10/100 Base-T Ethernet ports
Serial Console	RS-232(Female) Connector	
Factory Default Reset	Push Button	
LED	Power: (Green)	
	WAN: LINK/ACT (Green), one LED per pair	
	LAN (Port 1 ~ Port 4): LINK/ACT (Green:100M, Orange:10M)	
	ALARM: (Red)	
G.SHDSL	Support G.991.2 / G994.1 standards	
	TC-PAM line modulation	
	Configurable as either server or client mode	
	OAM IEEE 802.3 chapter 57 compliant	
	IEEE 802.3 2BASE-TL (aka 802.3ah) compliant	
	Rate negotiating / Manually rate adaptation configuration	
	Connection Loops: 1 pair (2 wires)	
	Support IPoE	
	Support PPPoE	
Routing/ Bridge Support	IP (RFC 791) routing is supported	
	TCP, UDP, ICMP, IGMP v1 and v2, ARP, RIP v1, RIP v2, OSPF, BGP-4	
	Transparent bridging (IEEE 802.1D)	
	PPP BCP (RFC 3185) support	
	IGMP snooping	
Diagnostics Capabilities	The router can perform self-diagnostic tests. These tests check the integrity of the following circuitry: –FLASH memory –SDSL circuitry –RAM –LAN port	

ATM Support	Multiple protocols over AAL5 (RFC1483) (Not support IPoA/PPPoA)
	Only 1 PVC
EFM Support	EFM mode compliant to IEEE 802.3
	PPP over Ethernet (RFC2516)
	Support of OAMPDU information and functionality (ITU-TY.1731)
EFM Support	OAMPDU Event Notification, Variable Request, Variable Response, Loopback Control
	VLAN base QOS (802.1P/Q), Priority Queue
Internet Access Sharing	NAT (includes multi-to-multi NAT) / SUA, 8192 NAT sessions
	Port restricted cone NAT
	SIP ALG pass-through
	NAT server (Port forwarding)
	Multi-NAT
	Dynamic DNS
	DHCP server/client/relay
Security	User Authentication (PAP, CHAP) with PPP (RFC 1334, RFC 1994)
	Microsoft CHAP
	Stateful packet inspection firewall
	Content filter
	Prevent Denial of service
	Access control of service
	Real-time attack alert and log
Network Management	Web-based Configuration, Command-line interface
	Password-protected Telnet support
	SNMP MIB I /MIB II support
	TFTP & FTP firmware upgrade and configuration backup
	Dying Gasp
VPN	IPSec VPN support, 10 VPN tunnels
	IKE/ Manual Key, DES/ 3DES/ AES Encryption
	MD5/ SHA1 Authentication, FQDN
	NETBIOS pass-through for IPSec, IPSec VPN keep-alive
	IPSec NAT Traversal
Others	DNS Proxy
	UNIX syslog
	Each Ethernet port can be only tagged or only untagged
	Application QoS
	IPv6