

PROSCEND®

6200 Series G.SHDSL.bis EFM/ATM VPN Router

Descriptions

Proscend 6200 G.SHDSL.bis EFM/ATM VPN Router provides secure and symmetrical high-speed connectivity over existing copper-line infrastructure that is ideal for SOHO and SME users. It features the latest G.Shdsl.bis technology supporting symmetrical upstream and downstream data rates up to 15.3Mbps/Pair (TC-PAM I28). Four pairs can be bonded together for aggregated bandwidth over 61 Mbps. **Proscend 6200 Series** VPN Router operates the SHDSL link in either EFM mode or ATM mode. It is designed to deliver business class Ethernet Service under EFM mode while providing the flexibility to be compatible with the existing DSLAM infrastructure under ATM mode.

Proscend 6200 series supports flexible VPN applications including VPN pass-through, client-to-VPN gateway and VPN LAN-to-LAN connection. It features IPSec VPN up to 12 encrypted tunnels for secure data communications between remote sites, home offices, and mobile users across public IP networks like the Internet. It also supports up-to-date 3DES and AES for data encryptions as well as MD5/SHA-1 and manual/IKE key for authentication.

The Quality of Service (QoS) features allow users to allocate network resources effectively. By classifying the priority of services, the powerful bandwidth management functions increase efficiency on latency-sensitive applications such as VoIP, video streaming, video conferencing and interactive game.

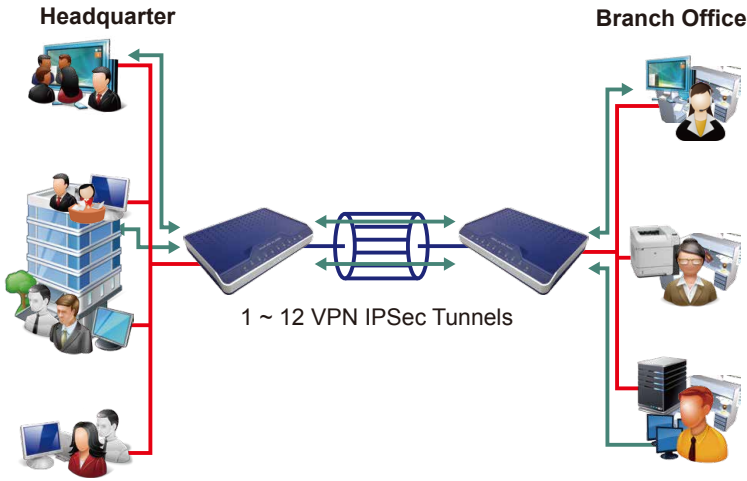
Proscend 6200 series enables service providers to offer symmetrical high-speed Ethernet service or point-to-point connectivity to their enterprise customers. It is the ideal copper-based Ethernet solution for quick deployment of standardized, reliable and secure services with carrier-class OAM and comprehensive management options.

Features

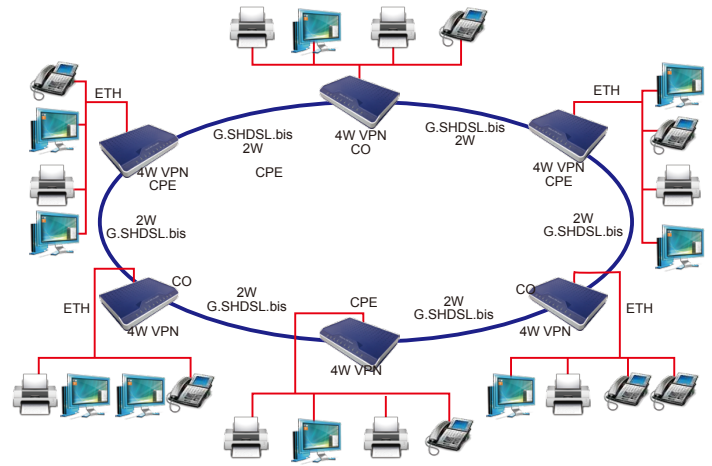
- **Extending Ethernet Services to sites with existing copper infrastructure**
- **Business-class Ethernet services with flexibility of mapping user traffic into Ethernet flows**
- **EFM Bonding up to 61 Mbps (4 pairs, TC-PAM 128)**
- **Support both EFM mode and ATM mode**
- **IPSec VPN for safeguarded connections**
- **Flexible and Rapid Service Deployment**
- **Support EFM OAM complying IEEE 802.3ah**
- **Low Delay, Jitter and Packet Loss for delay sensitive applications**



VPN IPsec Tunnels



Ring Topology



Specification

6200 series G.SHDSL.bis EFM/ATM VPN Router

Hardware Interfaces

WAN Interface:

- SHDSL.bis: ITU-T G.991.2 (2004) Annex A/B/F/G supported
- Support EFM Bonding and SHDSL M-Pair mode
- Line Code: TC-PAM 16/32/64/128
- Data Rate:
 - N x 64 Kbps (N=3~89) using TC-PAM 16/32
 - Max. 5.696Mbps (1-Pair)
 - Max. 11.392Mbps (2-Pair)
 - Max. 22.784Mbps (4-Pair)
 - N x 64 Kbps (N=3~239) using TC-PAM 64/128
 - Max. 15.296 Mbps (1-Pair)
 - Max. 30.592 Mbps (2-Pair)
 - Max. 61.184 Mbps (4-Pair)
- Impedance: 135 ohms

LAN Interface:

- 4-Ports 10/100M Switch, Auto-negotiation for 10/100Base-TX and Half/Full Duplex, Auto-MDIX

2-Port USB:

- Supports USB 2.0
- Supports 3.5G

Serial Console:

- RJ-45 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)

Bridging and VLAN

- IEEE 802.1D Transparent Learning Bridge
- IEEE 802.1Q and Port Based VLAN
- Spanning Tree Protocol (STP)
- Up to 2K Mac Address

Routing

- Static routing and RIP v1/v2(RFC 1058/2453)
- NAT/PAT (RFC 1631)
- NAT Application Level Gateways
- Skype/MSN/Yahoo Messenger (RF 2933)
- VoIP(SIP) pass through and VPN PPTP/L2TP pass through
- Virtual Server

Network Protocol

- IPv4 (ARP/RARP, TCP/UDP, ICMP)
- DHCP Client/Server, Relay
- DNS Relay/Proxy, Dynamic DNS (DDNS)
- IGMP v1/v2, IGMP Proxy, IGMP Snooping
- SNMP and UPnP

ATM

- 12 PVC
- OAM F4/F5 Loopback
- AAL5
- VC Multiplexing and SNAP/LLC
- EoA (RFC 2684/RFC 1483), PPPoA (RFC 2364) and IPoA (RFC 1577)
- Multiple protocol over ATM AAL5 (MPOA, REF 1483/2684)
- QoS(UBR/CBR/VBR/VBR-RT)

PPP

- PPPoE
- PAP/CHAP/MS-CHAP/MS-CHAPv2
- Configurable timer to auto-reconnect and idle times for timeout

QoS

- 802.1P Tag
- IPv4 TOS/DiffServ
- Class-based Prioritization and Class-based Traffic Shaping
- Class-based DSCP Mark
- Up to 8 priority queues

VPN

- IPsec (RFC 2411) up to 12 Tunnels
- DES/3DES/AES
- MD5/SHA-1 and IKE/Manual Key
- ISAKMP (RFC 2407/2408/4306) and IKE v1 (RFC 2409/4109)
- PSK
- L2 TP/PPTP

Firewall

- SPI (Stateful Packet Inspection) and DoS (Denial of Service)
- DMZ
- Access Control List (ACL)

Management

- Management via Web, Telnet and CLI
- Support SSH (RFC4250/4251/4252/4253/4254/4255/4256)
- SNMP v1/v2c/v3 (RFC 1157/1901/1905) and MIB II (RFC 1213/1493)
- Syslog with Remote Logging support
- Firmware Upgrade via TFTP
- EFM Oam (IEEE 802.3ah optional)
- Ethernet Oam (802.3ag optional)

Operating Environment

- Operating Temperature: 0~45°C
- Storage Temperature: -20 °C~70°C
- Operating Humidity: 20%~95% (non-condensing)

Regulatory

- ISO 9001 Quality Management
- CE Approval & EN60950 Certificate

Physical / Electrical

- Dimensions: 18.7 x 3.3 x 14.5cm (WxHxD)
- Power: 100~240VAC (via power adapter)
- Power Consumption: 9 watts Max.



Order Information

Specification \ Model	6200-2W/U	6200-4W/U	6200-8W/U
Maximum DSL wires	2-wires	4-wires	8-wires
Maximum data rate	5.69 Mbps (TC-PAM 16/32) 15.296 Mbps (TC-PAM 64/128)	11.392 Mbps (TC-PAM 16/32) 30.592 Mbps (TC-PAM 64/128)	22.784 Mbps (TC-PAM 16/32) 61.184 Mbps (TC-PAM 64/128)
2-Port USB	✓	✓	✓

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