

# G.SHDSL Router & DSLAM Patton 3224 G.SHDSL IpDSLAM

The Model 3224 G.SHDSL IpDSLAM combines 24 G.SHDSL ports, subscriber traffic management, and a powerful edge router for a complete broadband IP/Internet access platform.

NAT & NAPT Avoid address depletion

**DiffServ/ToS** *QoS for all traffic flows* 

**IP address & port filtering** *Create your own firewall* 

**DNS caching** Faster address lookups

**DHCP** Manage IP addressing for user LANs

**PPTP & PPPoE** Create Layer 2 tunnels

**IPsec** Create Layer 3 VPNs

**SNTP** Synchronize edge devices to time source

**RIP, OSPF & BGP** *Routing flexibility* 

**RADIUS Accounting & Authentication** *Authenticate & track users with standard tools* 

**Expansion modules** Adapt IpDSLAM to your network needs

**24 G.SHDSL Ports** Symmetric service to 4.6 Mbps

Redundant, removable power supplies Non-stop operation Patton's Model 3224 IpDSLAM is a costeffective solution for dedicated Internet service delivery in situations where the business case does not support the separate deployment of high-density, chassis based solutions, service creation platforms, and routers. With support for 24 ports of up to 4.6 Mbps symmetric G.SHDSL links and numerous uplink options, the 3224's flexibility is unsurpassed.

The 3224 IpDSLAM routes IP traffic using numerous standard routing protocols while maintaining strict quality of service (QoS) by prioritizing operator configured traffic flows using standard ToS bits. VPN applications can easily be deployed with L2TP or PPTPbased tunneling of IP traffic. Assigning traffic priorities to VPNs guarantees QoS.

Extensive IP address and port filtering makes the 3224 an excellent multi-user firewall and service creation platform. Either customize firewall services to the needs of the individual users or provide a standard global firewall service. Use the filters to segregate the traffic and wholesale service to other providers without losing control of your network or the level of service that is offered. Well thought-out solutions to common networking issues include support for NAT & NAPT for avoiding IPv4 address depletion, DHCP for value added services to SOHOs, DNS caching for quick address look-ups, SNTP for time server synchronization of edge

devices, and RADIUS accounting and authentication for validation, verification and accounting of user sessions.

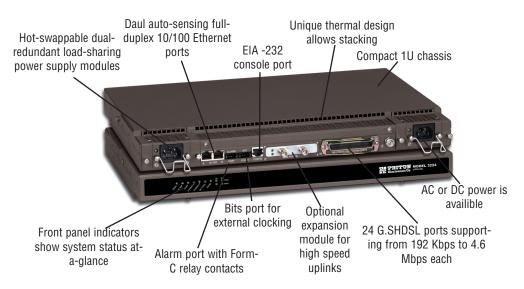


Optional up-link ports provide the flexibility of

Special Rates Available Call for Details

selecting the up-stream interface that is right for your network deployment needs. Co-locate with a DLC or use it in a building's wiring closet. Redundant, load sharing, removable power supplies provide maximum power protection. External BITS and alarm ports facilitate the deployment of the 3224 IpDSLAM in traditional central office environments.

Whether you are an ISP, ASP, or Carrier, the 3224 will improve the quality and variety of your service offering while reducing your investment in value added service platforms.For more information, visit us at www.patton.com.





# **Operating Features**

The Model 3224 lpDSLAM comes with the redundancy and ease of management required by service providers for high quality of service. Included with the purchase of every unit is free initial configuration support, one year of free technical services, one year warranty, and free software upgrades.

# Features included:

- ✓ A 1U high base unit with one expansion slot
- ✓ 24 G.SHDSL ports on an RJ-21X connector
- ✓ Two 10/100Base-T Ethernet ports
- ✓ Standard removable dual-redundant, loadsharing power supplies (AC or DC)
- ✓ Alarm port; BITS clock port; console port

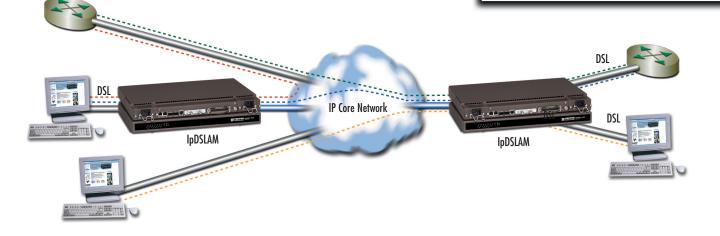
How easy is it to install our DSLAM? As easy as 1-2-3...

- 1. Plug in the power
- 2. Provision the port
- 3. Provide end-to-end IP

Features	Benefits
Redundant, Removable PS	Non-Stop Operation
BITS & Alarm ports	Deploy in CO environments
24 G.SHDSL Ports	Symmetric DSL to 4.6 Mbps
Two 10/100 Ethernet Ports	Redundant Up-Link
<b>Expansion Modules</b>	Customize Network Up-Link
L2TP	Create Layer 2 VPNs
IP-within-IP	Create Layer 3 VPNs
RIP, OSPF & BGP	Routing flexibility
<b>RADIUS Accounting &amp;</b>	Authenticate & track users with
Authentication	existing tools
NAT & NAPT	Masquerading
IP address & port filtering	Create firewalls & manage QoS
DNS Caching	Faster address lookups
DHCP	Manage user IP addresses
SNTP	Synchronize to time source

# Application

Use the Model 3224 ipDSLAM to create Layer 2 VPNs with L2TP or Layer 3 VPNs with IP-within-IP between IPDSLAMs or other third-party equipment.



# Specifications

### **DSL** Ports

24 G.SHDSL or 2B1Q ports presented on an RJ-21X 50-pin connector, each supporting data rates of nx64 (192 kbps-4.6 Mbps)

#### **Ethernet Ports**

Dual 10/100BaseT (RJ-45 connector); autonegotiating; half or full duplex operation

### WAN clocking

Internal, Network Receive Recover (from expansion port), External BITS via Form-C relav contacts

\* Specifications subject to change without notice.

#### **Front Panel Indicators**

LEDs for power, CPU, system, Ethernet, External clock, test mode, DSL, and Uplink Egress module

#### **Power Supplies**

Hot swap, dual-redundant AC or DC; AC power: 115 or 230 VAC (50/60 Hz); DC power: -36 to -72 VDC6 to -72 VDC

#### **Management Service**

HTTP. SNMP. Telnet Server, RS-232 Console Port, SYSLOG Client, Software upgrade via FTP or TFTP

#### **Alarm Reporting**

Configurable alarms; Remote SNMP Traps; Front Panel LEDs; Form-C relay contacts

#### **Compliance**

Safety: UL/CSA per UL1950 (METS) Canadian cMET and CS-03. EMC Directive 89/336/EEC, Low-Voltage Directive 73/23/EEC (EN60950), FCC Part 15. CE Mark. CTR12. CTR13. FCC Part 68

#### **Enviroment**

Operating temperature: 48VDC model 0 to 50 °C (32 to 122 °F); AC model 0 to 40°C (32 to 104 °F) Humidity: 5-90% non-condensing

#### **Dimensions**

48.25 W x 32.00 D x 4.44 H cm (19.00 W x 12.60 D x 1.75 H inches)-1U by 19 in. wide

**PE-Inalp Networks Private Ltd** An Associate of



Old No. 14 and New No.6, Brahadambal Road, Nungambakkam High Road Čhennai: 600 034, India Phone +91 44 45490395/6/7 Fax +91 44 4549.0394 Email sales@patton.co.in Web www.patton.co.in



Meriedweg 7 CH-3172 Niederwangen Switzerland Phone +41 (31) 985 25 25 Fax +41 (31) 985 25 26 E-mail sales@inalp.com Web www.inalp.com

# Patton Electronics Co.



7622 Rickenbacker Drive Gaithersburg, Maryland 20879 USA

Phone +1 301 975 1000 Fax +1 301 869 9293 E-mail sales@patton.com Web www.patton.com

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