# **D-Link**®



## **48-Port IP DSLAM**

The D-Link DAS-3248 is a 48-port IP-based DSL Access Multiplexer that provides ADSL access to CPE (consumer premise equipment) ADSL modems/routers at the subscribers' side. This DSLAM connects to the network service provider's network through its Ethernet interface. Using the latest ADSL/ADSL2/ADSL2+ technology, this IP DSLAM provides carriers a very cost-effective solution to offer their subscribers with features such as bandwidth management, traffic prioritization and data flow security control.

#### Designed for Multi-Unit, Multi-Tenant Buildings

The D-Link DAS-3248 IP DSLAM delivers the next generation of high-performance business and residential DSL services. With the DAS-3248, carriers can offer digital video, high bandwidth Internet access.

#### 48 ADSL Ports With Built-in Splitters

The DAS-3248 IP DSLAM provides 48 ADSL port connections, plus built-in ADSL/POTS splitter per port (16 ADSL ports via 2 RJ-21 (Telco-50) connectors, plus 16 splitter ports through 2 other RJ-21 (Telco-50) connectors). A 10/100BASE-TX Ethernet uplink connects the DAS-3216 to the carrier's network.

#### **VLAN Support for Enhanced Security**

The DAS-3248 IP-DSLAM supports 802.1Q Tagged VLAN to provide complete subscriber isolation and enhance the ADSL network performance.

#### Versatile Management

Up to 8 DAS-3248 can be cascaded and managed as one single unit. With the local RS-232 and Ethernet management port, plus inband SNMP/TELNET channel, the DAS-3248 provides local and remote management capabilities using a Command Line Interface (CLI), SNMP and Telnet. In addition, a Microsoft NT/SNMP based GUI EMS system provides service providers with low-cost, high-value central management capability of the DAS-3248.

#### **Complete ADSL Solution**

With the DAS-3248 IP-DSLAM, D-Link provides service providers with a complete ADSL service solution. This IP DSLAM integrates and operates seamlessly with D-Link's extensive range of ADSL modems and routers Customer Premise Equipment (CPE).

#### **Product Function & Features**

#### Cost Saving Solution for Service Providers

- 48 ADSL/ADSL2/ADSL2+ subscriber interface ports
- 10/100/1000BASE-T and fiber Gigabit uplinks to carriers' backbones
- Built in POTS splitter per port
- Easy expansion: low-profile rack-mount boxes can be cascaded to maximum 8 units and managed as one single entity

#### Flexible and Secure Configuration/Management

- Microsoft NT/SNMP-based GUI EMS
- Local RS-232 out-of-band CLI and remote in-band
- SNMP/TELNET management

- 3-levels of user privilege system management
- SNMP v1, v2c, v3 support
- Firmware upload/download via FTP or TFTP

#### Advanced Functions for Broadband Service Offering

- IGMP snooping
- Up to 8 VCs, 128 MAC addresses per DSL port
- Up to 64 x 128 MAC addresses, 2K Multicast MAC addresses per DAS-3248 device
- Up to 512 VLANs (any value in 4096)
- Static VLAN and port-based VLAN support
- Configurable packet size (64 to 1536 bytes)

- Security functions: VLAN filtering, MAC filtering, IP filtering,
- MAC-based and IP-based Access Control List (ACL)
- 802.1d Spanning Tree for redundant backup bridge paths
- 802.1p traffic prioritization for QoS
- MAC-based and IP-based rate limiting
- 802.3ad link aggregation
- BRAS, 802.1x, DHCP server/relay, PPPoE, MPLS, VLAN-based VPN, L3 router, L2TP \*

<sup>\*</sup> Functions available in future firmware upgrade.

## **Technical Specifications**

#### **Device Ports**

- 48 ADSL/ADSL2/ADS2+ ports (2 RJ-21 Telco-50 connectors)
- 48 splitter ports (2 RJ-21 Telco-50 connectors)
- 1 10/100/1000BASE-T copper Gigabit port
- 1 1000BASE-LX fiber Gigabit port supporting max. 10 km single-mode fiber cable distance
- 1 10/100BASE-TX Ethernet port
- 1 RS-232 console port

#### **Protocol Handling Capability**

- 8 VCs per DSL port
- 128 MAC addresses per DSL port
- 2K Multicast MAC addresses
- 512 VLAN (any value in 4096)
- Configurable packet size: 64 bits to 1542 bits

RFC 1514, 2515 Definitions of Managed Objects for ATM Management

#### ADSL/ADSL2/ADSL2+ Interface

- Downstream DMT data rate from 32Kbps to 10.5Mbps
- Upstream DMT data rate from 32Kbps to 1Mbps
- Standard compliance: ITU G.992.1 (G.DMT), G.DMT.bis, ITU G.992.2 (G.Lite), ANSI T1.413 issue 2, ITU G.994.1 (G.handshake) for ADSL, G.992.3 for ADSL2, G.992.5 for ADSL2+
- Extended power management capability to optimize power consumption for each application
- Maximum cable distance from DSLAM to subscriber CPE: 6.1 km (20,000 feet)

#### Management

- Microsoft NT/SNMP-based GUI EMS
- Local RS-232 CLI and Ethernet SNMP/Telnet management
- Remote in-band SNMP/Telnet management
- SNMP v.1, v.2c, v.3
- Up to 8 DAS-3248 cascaded units manageable as one single unit

#### Firmware Upload/Download

Through FTP or TFTP

#### **Private MIBs**

D-Link private MIBs

STP, IGMP snooping, GMRP, GVRP, LACP, LACP marker, SNMP/UDP/IP/MAC/Ethernet

#### **Diagnostic LEDs**

- Power (perdevice)
- Maintenance (perdevice)
- Alarm (per device)
- Master (perdevice)
- 1 to 48 (ADSL ports)

#### Physical & Environmental

#### **Power Requirement**

-42 to -56 VDC

#### **Power Supply**

Auto ranging 90 to 250 VAC/50-60 Hz Internal universal power supply

#### **Power Consumption**

150 watts (max.)

#### Dimension

440 (W) x 400 (D) x 44 (H) mm (device only) 19-inch standard rack-mount width, 1 U height

#### Weiaht

6.8 kg (device only)

#### **Operating Temperature**

0° to 50 °C (32° to 122 °F)

#### Storage Temperature

-30° to 70 °C (22° to 158 °F)

#### Humidity

5% to 90% RH non-condensing

### ADSL

#### **Emission**

- FCC Class A
- CE Class A

#### Safety

EN60950

### **Ordering Information**

**DAS-3248** 

48-port IP DSLAM



D-Link is a registered trademarks of D-Link Corporation/D-Link System Inc. All other trademarks belong to their

RECYCLABLE

Rev. 01 (Aug. 2004)

U.S.A Europe Germany France Netherlands Belaium Italy Iberia Norway Denmark Finland Singapore Australia Japan China India Middle East (Dubai) TEL: 9714-8834234 Turkey Egypt Israel LatinAmerica Brasil South Africa Russia

D-Link Corp.

TEL: 1-905-8295033 TEL: 44-20-8731-5555 TEL: 49-6196-77990 TEL: 33-1-30238688 TEL: 31-10-282-1445 TEL: 32(0)2-517-7111 TEL: 39-2-2900-0676 TEL: 34-93-4090770 TEL: 46-(0)8564-61900 TEL: 47-22-309075 TEL: 45-43-969040 TEL: 358-9-2707-5080 TEL: 65-6774-6233 TEL: 61-2-8899-1800 TEL: 81-3-5434-9678 TEL: 86-10-8518-2533 TEL: 91-022-652-6696 TEL: 90-212-335-2553 TEL: 202-414-4295 TEL: 972-9-9715700 TEL: 56-2-232-3185 TEL: 55-11-55039320 TEL: 27(0)1266-52165

TEL: 7-095-744-0099

TEL: 886-2-2916-1600

TEL: 1-714-885-6000

FAX: 1-866-743-4905 FAX: 1-905-8295223 FAX: 44-20-8731-5511 FAX: 49-6196-7799300 FAX: 33-1-30238689 FAX: 31-10-282-1331 FAX: 32(0)2-517-6500 FAX: 39-2-2900-1723 FAX: 34-93-4910795 FAX: 46-(0)8564-61901 FAX: 47-22-309085 FAX: 45-43-424347 FAX: 358-9-2707-5081 FAX: 65-6774-6322 FAX: 61-2-8899-1868 FAX: 81-3-5434-9868 FAX: 86-10-8518-2250 FAX: 91-022-652-8914 FAX: 9714-8834394 FAX: 90-212-335-2500 FAX: 202-415-6704 FAX: 972-9-9715601 FAX: 56-2-232-0923 FAX: 55-11-55039321 FAX: 27(0)1266-52186 FAX: 7-095-744-0099#350 FAX: 886-2-2914-6299