



BLACK BOX[®]

NETWORK SERVICES

G.shdsl Ethernet Extender



Key Features

- ▶ 3 Products in 1: Bridge, Router, Gateway
- ▶ G.shdsl Standard Delivering up to 9.2 Mbps
- ▶ DHCP and DNS Support
- ▶ ATM Support with PPPoA/IPoA/RFC1483/PPPoE
- ▶ Inverse Multiplexing Over ATM with 2 to 4 G.shdsl Ports
- ▶ Basic Firewall Protection
- ▶ Virtual Private Networks Support
- ▶ Web-based Management
- ▶ Local and Remote Administration and Firmware Upgrade

Black Box' Ethernet Extender MDS2210AE is an integrated bridge, router, and gateway device with four G.shdsl ports for DSL access, and a four-port 10/100BASE-T Ethernet switching hub allowing up to four PCs or devices to be connected directly to Ethernet Extender MDS2210AE without the need for a separate hub.

Based on the worldwide G.shdsl (ITU-T G.991.2) standard, the Ethernet Extender MDS2210AE provides businesses such advantages as unrivaled rate/reach, excellent tolerance to noise, and bridged taps. All of these advantages will enable Service Providers to provide increased end user satisfaction at low system cost.

The Ethernet Extender MDS2210AE has been designed to interoperate with existing routers and firewalls, and to be installed on a company's existing network infrastructure, thus protecting an organization's initial capital outlay. The Ethernet Extender MDS2210AE contains a four-port 10/100BASE-T configurable switching hub, and capable of operating as a bridge, router, or gateway device.

The Ethernet Extender MDS2210AE supports DHCP, DNS for easy LAN setup, and has builtin basic firewall and VPN support to provide new network installation with secure data on an always-on DSL connection.

The Ethernet Extender MDS2210AE integrated Inverse Multiplexing over ATM technology enables high-speed symmetric DSL access at above 2.3 Mbps beyond the coverage area served by traditional DSL or two-wire and four-wire G.shdsl.

The Ethernet Extender MDS2210AE scales with network and bandwidth needs. The Ethernet Extender MDS2210AE can be provisioned to operate with up to four G.shdsl ports. With four G.shdsl lines, speeds up to 9.2 Mbps can be provisioned over the network without the need for additional expensive truck rolls. This reduces capital costs and operating expenses through device consolidation.

Integrated with an easy-to-use Web-based management system, Ethernet Extender MDS2210AE reduces mainte-

nance and deployment costs with its remote management capability, configuration store/restore facility, and firmware download support.

Ethernet Extender MDS2210AE offers auto-sense 10/100BASE-T for automatic discovery of Ethernet speed and auto MDI/MDIX capability, allowing automatic detection and line pairs switching. This eliminates the need to configure port speed as well as the need for crossover cables.

Specifications

SHDSL Features

- Standard ITU-T G.shdsl (G.991.2)
- Signal Format TC-PAM
- Data Rate: 64 KBPS ~ 9.2 MBPS
- Connector: RJ-11
- Impedance: 135 OHMS

ATM Features

- RFC1483 Encapsulation (IP, Bridging, and encapsulated Routing)
- PPP over ATM (LLC & VC Multiplexing) (RFC2364)
- Classical IP (RFC1577)
- Inverse Multiplexing OVER ATM
- Supports 8 PVCs
- Traffic shaping
- OAM (I.610) Support
- PPPoE Relay
- PPPoE Client

LAN Features

- DHCP Server
- DHCP Client
- DHCP Relay
- DNS Relay

Routing Features

- Dynamic Routing with RIP
- Static Routing

Management Features

- Plug-and-play Installation
- Local and Remote Management
- WEB-BASED Configuration
- Console port for local Management
- TELNET Configuration
- Command Line Interface
- Firmware upload/download via TFTP/BOOTP and WEB-BASED management
- Alarm Status and Power Indicator
- Event Logging

SECURITY Features

- Firewall
 - Packet Filtering
 - NAT
 - NAPT
- VPN
 - PPTP Support
- Password protected configuration access
- User Authentication (PAP/CHAP) with PPP

PHYSICAL INTERFACES

- 4-Port Auto-sensing 10/100BASE-T Ethernet Hub (RJ-45) with Automatic MDI/MDIX for each Port
- Four G.shdsl Ports (RJ-11)
- WAN/LAN Status & Power and Ethernet LED Indicators
- Console Port

Physical Specifications

- Height: 1.75 IN.
- Width: 12 IN.
- Depth: 8.4 IN.
- Weight: 3 LBS

Power Requirements

- 100-240 VAC, 50/60 HZ

Operating Environment

- Temperature: 0° to 40 °C,
- Humidity: 5% to 90% RH non-condensing

Minimum System Requirements

- Any Computer with an Ethernet 10BASE-T or 100BASE-T Interface
- Any Operating System that supports an Ethernet Conneciotn with an IP stack

REGULATORY APPROVALS

- UL 1950
- TUV
- FCC PART 15 CLASS A
- FCC PART 68
- CE MARK
- CS 03 ISSUE 8 INDUSTRY CANADA
- IEC 60950, CSA 950/US

Ordering information

ITEM

CODE

G.shdsl 9,2Mbps, Bridge & RouterMDS2210AE

Black Box Network Services - The world's largest network services company

We are, with 25 years of experience, the world leader in network infrastructure services.

On the Phone — no charge, answer calls in less than 20 seconds, find the right product with our technical experts.

On-site — superior design and engineering, Certified installations, end-to-end service.

On-line — receive technical knowledge on-line, including technology overviews, BLACK BOX Explains and the Knowledge Box.

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