# BLACK BOX®
## NETWORK SERVICES

# MULTISERVER 1000 +
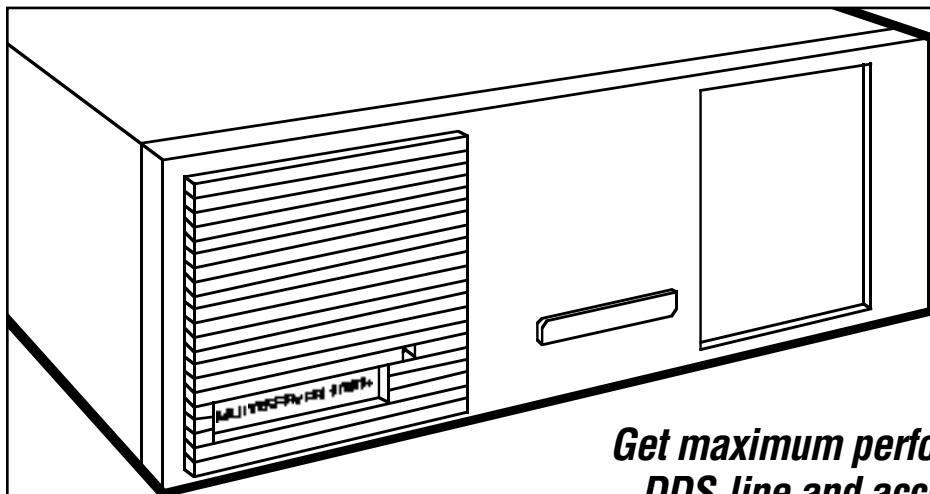


**Get maximum performance over a single DDS line and access to Frame Relay.**

## Key Features

▶ *Access private leased lines, public Frame-Relay, ISDN, and hybrid networks.*

▶ *Reduce communications costs by sharing a single leased/ISDN line, or a single PVC.*

▶ *Get high-quality voice and fax communications that use as little as 2 kbps of bandwidth.*

▶ *Route IP/IPX LAN protocols and bridge all others.*

▶ *Supports FXO, FXS, and E&M user interfaces.*

With the Multiserver 1000+, your voice, fax, and LAN traffic can share a phone line with your data traffic. You have to pay for just one line instead of four—that's savings. It's also the most economic use of your available bandwidth.

The Multiserver 1000+ goes beyond other multiplexors on the market by offering a choice of communication methods, including private analog or digital leased lines, public Frame-Relay services, and ISDN. In other words, the 1000+ can grow with your company.

The 1000+ can connect to almost any asynchronous or synchronous device: bridges, routers, X.25 PADs, hosts, FEPs, cluster controllers, and PCs.

Voice and fax users can connect to any analog telephone or fax machine on your network thanks to voice/fax switching. Async users enjoy the same flexibility. The Multiserver 1000+ supports FXO, FXS, and E&M user interfaces.

And for flexible LAN/WAN connectivity, the 1000+ supports TCP/IP, Novell® IPX™, and MICOM® EasyRouter™.

**Additional Features:**

• Five-slot design for branch office connectivity requirements.

• Built-in secondary MicroBand ATM WAN link that serves as a backup to switched network services.

• Built-in asynchronous and synchronous channels configurable for data rates up to 38.4 kbps.

• Supports NETMan PC-based network management system.

• Optional integral CSU/DSU.

• Menu-driven configuration.

## Typical Application

Integrate voice/data/fax onto a single digital line with the Multiserver 1000+.

#12953

# Specifications

**Base Unit (MX255A):**

**Data Channels —** Async: 41; Sync: 1

**Voice/Fax Channels —** 4

**Data Rate —** Async: up to 38.4 kbps; Sync: up to 38.4 kbps (Fast Packet, TDM); up to 19.2 kbps (Protocol Sensitive)

**Diagnostics —** (3) startup, local/remote channel loopbacks, local/remote composite loopbacks

**Link Speeds —** MicroBand ATM up to 64 kbps; Frame Relay up to 384 kbps

**Flow Control —** EIA (RTS/CTS, DTR/DSR); X-ON/X-OFF

**Protocols Supported —** Async: DEC™ VT100™ Smooth Scroll, HP® ENQ/ACK, Tandem, WANG®; Sync: all products

**Size —** 6.5"H x 17.5"W x 12"D (16.5 x 44.5 x 30.5 cm)

**Weight —** 22 lb. (10 kg)

**MX222C:**

**Transmission Mode —** Serial async; full-duplex

**Configuration —** DCE

**Speed —** 50 to 38,400 bps

**Interface —** RS-232, V.24/V.28

**Connectors —** (6) DB25 (female)

**MX223C:**

**Transmission Mode —** Serial async; full-duplex

**Configuration —** DCE

**Speed —** 50 to 38,400 bps

**Interface —** RS-232, V.24/V.28

**Connectors —** (12) RJ-45 female

**MX224C:**

**Transmission Mode —** Serial async, full-duplex

**Configuration —** DCE

**Speed —** 50 to 38,400 bps

**Interface —** RS-422, RS-423

**Connectors —** (12) RJ-45 female

**MX237C-1, MX237C-2:**

**Channels per Voice/Fax Card —** MX237C-1: One channel; MX237C-2: Two channels

**Enhanced Interfaces —** E&M Types I, II, and IV, FXS Loopstart, FXO Loopstart

**Connectors —** Requires one of these interface cards: MX402A, MX404A, MX407A

**Indicators —** OK, LO, RO, LS, RS, TM

**Power —** From the Multiserver interface

**MX246A-R2:**

**Speed —** Saturates up to (6) 56/64-kbps links with 512 packets per second (64-byte packets)

**Standards —** IP per RFC 1009, IPX per IPX Router specification version 1.10 and RFC 1362
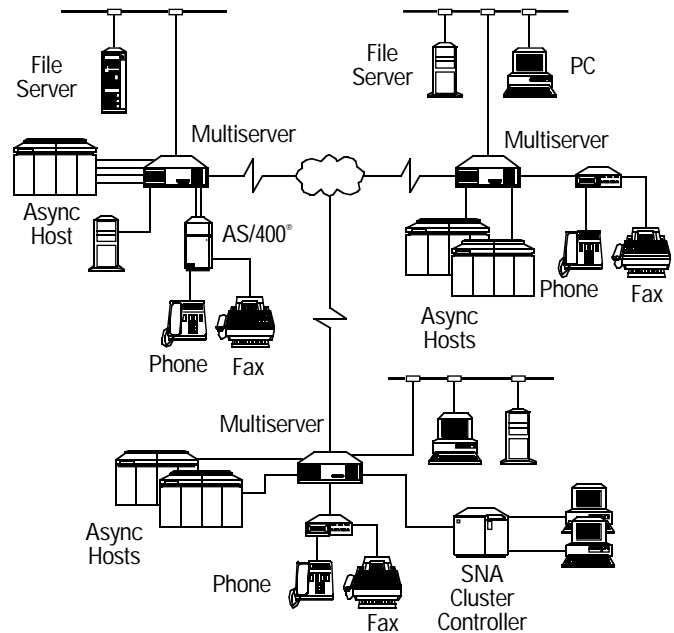
**Connectors —** DB15 AUI, RJ-45 10BASE-T

**Power —** From the Multiserver base unit

**MX226C-R2:**

**Converter —** RS-232 to V.35

**Connectors —** To central control module: DB25 male; To V.35 connector: DB25 female

## *Voice, fax, and LAN traffic can share a phone line with data traffic.*



# *Ordering Information*

| ITEM | CODE |
| --- | --- |
| Multiserver 1000+ | MX255A |
| MS CommPak (5.1) | MX256A-R3 |
| Multiserver Voice Fax Module | |
| 1-Channel | MX237C-1 |
| 2-Channel | MX237C-2 |
| Multiserver Interface Cards | |
| E&M (PBX or Switching System) | MX402A |
| FXO (Central Office Switch) | MX404A |
| FXS (Phone or Fax Link) | MX407A |
| Multiserver Expansion Modules | |
| 6-Channel | |
| Async Only | MX222C |
| 12-Channel | |
| Async RJ-45 with Line Driver | MX223C |
| 12-Channel Async RJ-45 with Line Driver | MX224C |
| Multiserver V.35 Converter/DCE | MX226C-R2 |
| Multiserver Integrated Router Module–Turbo | MX246A-R2 |
| Multiserver 56K CSU/DSU Module, Single-Channel | MT150C |
| DB25 Crossover Cable (Composite to DCE) | |
| RS-232 Male to Male | EZ423-0015 |
| RS-232 Male to Female | EZ424-0015 |