



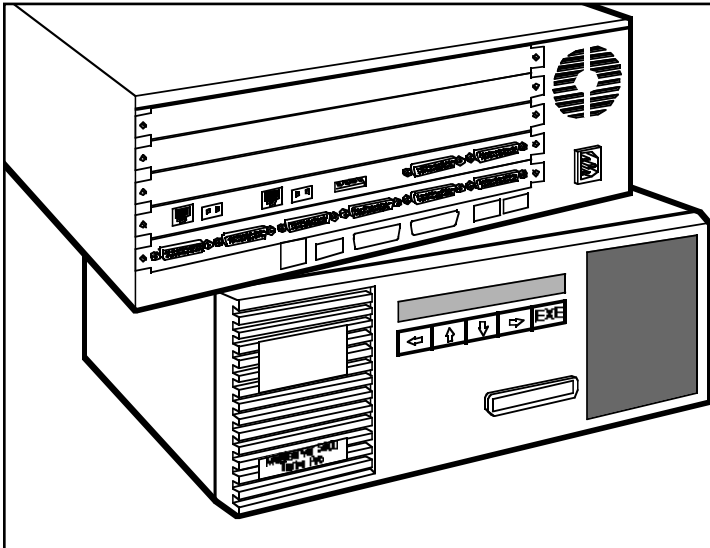
BLACK BOX[®]

NETWORK SERVICES

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Black Box Corporation.

Black Box Network Services • 464 Basingstoke Road • Reading, Berkshire, RG2 0BG • Tech Support: 0118 965 6000 • www.blackbox.co.uk • e-mail: techhelp@blackbox.co.uk

MULTISERVER 5000 TURBO PRO



High-performance integration of data, voice, fax, and LAN traffic over a single low-cost network.

Key Features

- ▶ **Creates a three-site WAN using two 64-kbps lines.**
- ▶ **MicroBand ATM switching combines voice, fax, and LAN traffic into one network.**
- ▶ **Connect to T1 lines and PBX with the optional T1 Module.**
- ▶ **Completely compatible with all other Multiservers.**
- ▶ **Easily expands with your WAN—just add module cards.**
- ▶ **Built-in frame relay.**

If you're paying for more than one communication line to send voice, fax, and data traffic between any two separate locations—across the country or around the world—you're wasting money, and lots of it.

Save money every month with the Multiserver 5000 Turbo Pro. It multiplexes all your voice, fax, and data transmissions onto a single line. With only one line you don't have the many problems that arise when you try to maintain—and pay for—too many data lines.

Multiservers offer the most sophisticated compression and multiplexing algorithms available—so you can get the best voice quality and the fastest data throughput possible in a voice/data multiplexor.

Dynamic bandwidth allocation takes advantage of the normal lulls in conversation to maximize

bandwidth use. When you pause to take a breath, the Multiserver Turbo Pro reopens the whole channel to data traffic only—but you always get a clear signal.

Advanced signal manipulation makes the most of your leased bandwidth. Adaptive Huffman encoding and Lempel-Ziv algorithms compress async data. Run Length Compression techniques condense sync data.

You can tie three major sites together and merge all the voice, fax, data, and LAN-bridge traffic. Turn multiple networks and phone systems into a single easily manageable and affordable network.

With optional modules, the Multiserver 5000 Turbo Pro can provide up to 41 user channels and up to 8 voice/fax channels.

Typical Application

Used in client/server, async host, UNIX[®] host, IBM[®] SNA, AS/400[®], and IBM mainframe environments.

Specifications

Multiserver 5000 Turbo Pro (MX239A)

Data Format: Base Unit only:
Channel: 5 channels async or 4 async/1 sync; Composite: Sync, internal/external clocking, full-duplex

Diagnostics: Channel: Local/remote channel loopback, local/remote channel output, local sync channel loopback;
Composite: Remote composite loopback, local system loopback

Expansion Slots: (4) for Expansion Modules and Voice/Fax Cards; (1) for the NMS Module

Flow Control: CTS/DTR and X-ON/ X-OFF (configurable per channel end); HP® ENQ/ACK; Tandem®, WANG®

Multiplexor Technique:
Microband ATM

Speed: Channel: Up to 38,400 bps (async); 1200 bps to 19.2 kbps (sync, DLC, internal/external clocking); Composite: 1200 bps to 64 kbps (sync, internal/ external clocking)

User Channels: 5 sync/async (expandable to 41)

Voice/Fax Channels: Up to 8 with modules

Interface: RS-232/V.24, V.28

Power: 115/230 VAC, 60/50 Hz, 135 watts

Size: 6.5"H x 17.5"W x 12.5"D (16.5 x 44.5 x 31.8 cm)

Weight: 22 lb. (10 kg)

T1 Access Module (MT056C)

Data-Port Speed: N x 56/64 to 512 kbps

DSO Assignment: User-selectable

Framing: D4, ESF

Line Code: AMI, B8ZS

TDM Port Clocking: Internal and Loop

T1 Transmit Timing: External (DS-1 or DSX-1), internal

Interface: T1 (1.544 Mbps)

Connectors: RJ-48C

Digital Voice Card (MT050C)

Group 3 Fax Rates: 2.4, 4.8, 7.2, and 9.6 kbps

Hardware: 72-pin SIMM module

Voice Compression Rate: 4, 4.8, 7.2, 8, 9.6, 12, 14.4, 16 kbps

Voice Output Attenuation: 25 dB

Digital Voice Expansion Module (MT052C)

Digital Voice Module Slots: 12

You may also need . . .

- T1 Access Module
- Digital Voice Cards
- Expansion Modules
- Male-to-Male Crossover Cable
- AT Premium Modem Cable, 10 ft. (3-m)
- RS-232 Cable, 10-ft. (3-m)

Technically Speaking

The Multiserver 5000 Turbo Pro supports up to three Multiservers in a star or ring network topology. It can also act as a high-performance feeder into a Multiserver 10000 network. Features of the Multiserver 5000 Turbo Pro include:

- 802.3 Ethernet Remote LAN Bridge option.
- Sync channel speeds up to 64 kbps for DLC, TDNI and Fast Packet.
- DEC™ LAT™/TCP Telnet Remote Terminal Server option.
- Support of a wide range of asynchronous and synchronous protocols.
- Full data and voice/fax switching capabilities.

Ordering Information

ITEM	CODE
Multiserver 5000 Turbo Pro.....	MX239A
T1 Access Module	MT056C
Digital Voice Card	MT050C
Digital Voice Card, Package of 6.....	MT051C
Digital Voice Expansion Module	MT052C

When using the Multiserver 5000 Turbo Pro in a Multiserver 1000 environment, you may want to use...

MS1 Expansion Module Sync/Async.....	MX215C
MS1 Expansion Module Async.....	MX222C
12-Channel MS1 Expansion Module Async RJ-45.....	MX223C
12-Channel MS1 Expansion Module Async RJ-45 with Line Driver	MX224C
Multiserver Voice Fax Module	
1-Channel.....	MX237C-1
2-Channel.....	MX237C-2
MS1 V.35 Converter/DCE	MX226-R2
MS1 56K CSU/DSU Module	MT150C
MS SNA Spoofer.....	MX217A-232
MS1 Rackmount Kit.....	RM220