

# MICOM MARATHON<sup>®</sup> 3K

## Integration Multiplexer

The Marathon 3K is one of a full family of industry-leading Integration Multiplexers offering cost-effective solutions for small- to enterprise-size networks.



**Built-in Voice/Fax and Legacy Data Integration**

## Features

- Integrates legacy data with LAN and voice/fax traffic over a common private leased line, ISDN, or public and private frame relay link for substantial cost savings
- Locally-attached frame relay devices can transparently pass traffic to the frame relay network, protecting capital equipment investments
- Two built-in voice/fax channels
- Superior 8 Kbps G.729 ClearVoice™ technology ensures toll-quality telephone conversations while consuming minimal bandwidth
- Allows cost-effective time-of-day WAN access and dynamic bandwidth management to meet peak demands of multimedia traffic
- Flash memory simplifies network upgrades, saving time and expense
- Modular 3-slot design supports optional Integration Router Module, Integral Hub Module, voice/fax and legacy data expansion
- Synchronous channel speeds up to 512 Kbps using premises frame relay or 64 Kbps for all other protocols
- Asynchronous port switching and contention allow remote users to easily share aysnc resources
- Supports PC-based NETMan™ and terminal-based network management systems
- Three-year hardware warranty

# Overview

The Marathon 3K combines built-in voice/fax and legacy data integration with optional LAN integration and routing capabilities for convenient branch-office internetworking. A cost-effective, three-slot modular design supports an additional voice/fax module, legacy data expansion or an Integration Router Module.

Private leased lines or public and private frame relay services may be utilized for cost-effective internetworking. <sup>™</sup>MicroBand ATM cell relay allows optimal throughput for integrated traffic over private leased lines. In MicroBand ATM applications, network resiliency can be enhanced using a wide-area link backup over dial-up or ISDN connections.

For public and private frame relay access, the Marathon 3K allows integrated communications traffic to travel over a common Permanent Virtual Circuit (PVC) to its destination. Multiple frame relay links can be configured to segment traffic for access to multiple frame relay carriers. The Marathon 3K also allows locally-attached frame relay devices, including those that support RFC 1490 encapsulation, token ring and SNA applications, to transparently pass traffic to the frame relay network.

The Marathon 3K supports ClearVoice technology on its built-in voice ports, based on the International Telecommunications Union's (ITU) G.729 standard for WAN voice compression. A new, more powerful digital signal processor and advanced algorithm provide toll-quality voice at 8 Kbps compression rates. Silence suppression and other bandwidth efficiencies reduce the average consumed bandwidth by 50% or more.

The Marathon 3K handles virtually all legacy data protocols, including DEC VT100, H-P ENQ/ACK and SNA/SDLC. For LAN traffic, an optional Integration Router Module provides robust LAN routing capabilities. High-speed legacy data and LAN compression provide optimal bandwidth efficiency.

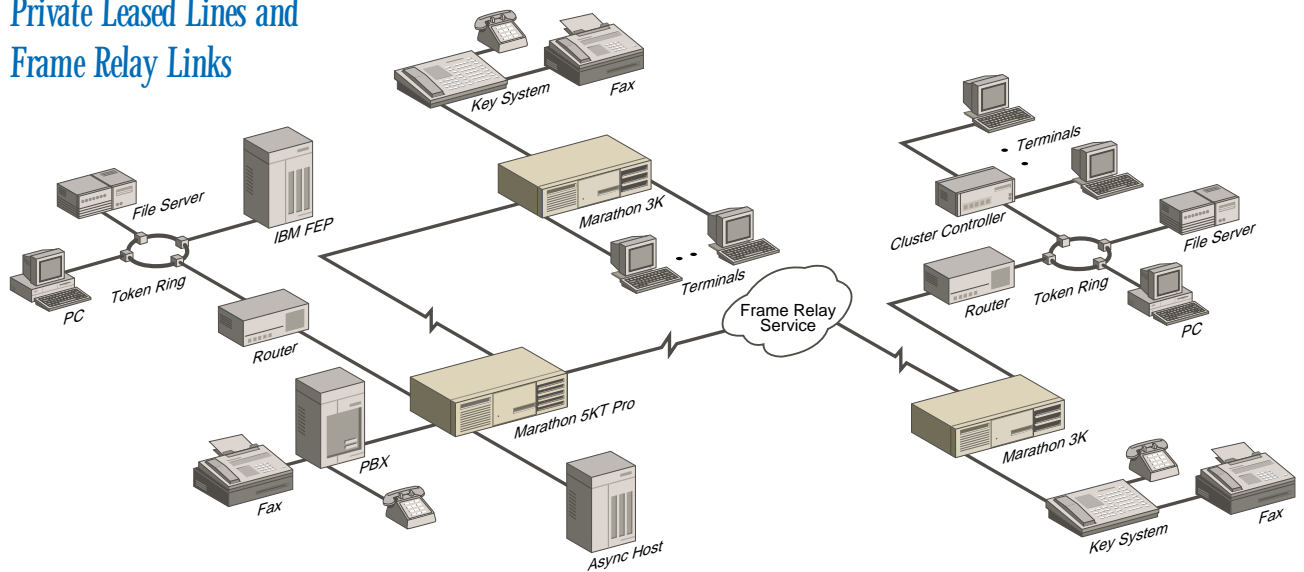
The Marathon 3K provides built-in integration of voice/fax communications with LAN and legacy traffic over frame relay or private leased lines.



DECEMBER 1996

# Specifications

## Marathon 3K in a Hybrid Network That Combines MicroBand ATM, Private Leased Lines and Frame Relay Links



### COMPOSITE WAN LINKS

Primary (Port A1)

Female DB-25, strap-selectable as RS232, X.21, or V.35; configured as DCE; serial synchronous; internal/external clocking

Secondary Backup Link (Port A2)

Female DB-25 RS232; configured as DCE; serial synchronous; internal/external clocking

### MicroBand ATM LEASED LINE ACCESS

1 Link supporting access rates from 2400 bps to 128 Kbps

### FRAME RELAY ACCESS (Port A1 and A2)

2 Physical Links configurable up to 48 PVCs\*  
Access Rates: 56 Kbps to 1.536 Mbps (T1)\*  
Maximum Sustained Throughput: 384 Kbps

### VOICE/FAX CHANNELS

Base Unit with 2 built-in Voice/Fax Channels

Interfaces Supported on Base Unit:

E&M 2 & 4 wire, I, II, IV, V, FXS, FXO

Voice/Fax Expansion Models Supported:

TUVM, VM and CVM

Maximum Voice/Fax Channels Supported: 4

### DATA CHANNELS

Female DB-25; full-duplex; configured as DCE

Maximum Async Data Channels: 26

Maximum Sync Data Channels: 2 (Ports A2 and A3)

### DATA CHANNELS

Data Expansion Models Supported:

5000E/6, 5000E/6A, 5000E/12, 5000E/12LD

Data Rates:

Async: Up to 38.4 Kbps

Sync: Up to 512 Kbps (premises frame relay) or 64 Kbps (all other protocols)

Flow Control: EIA (RTS/CTS, DTR/DSR); XON/XOFF; HP ENQ/ACK; Tandem; Wang and Data General

Protocols Supported:

Most standard async and sync protocols

### OPTIONAL MODULES

Integration Router Module (IRM)

Integral Hub Module (IHM)

Data Expansion Modules

Voice/Fax Expansion Modules

### SOFTWARE UPDATES

Single-Bank Flash memory supplied with base system;

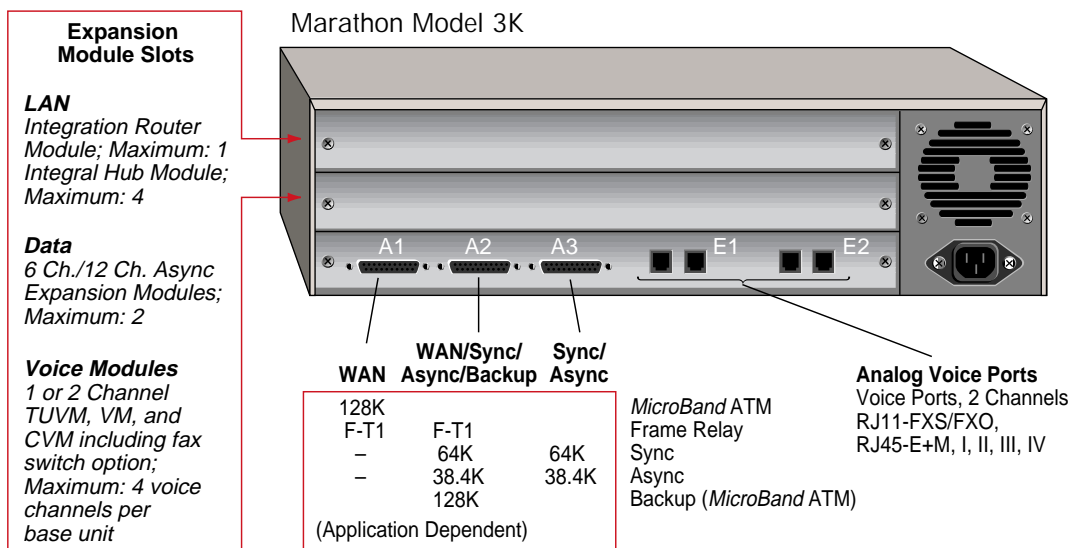
Dual-Bank Flash available as an upgrade with realtime clock (5003M/RTC, SIMM module)

### COMPATIBLE MICOM PRODUCTS

All MICOM Marathon products; link compatible with MICOM NetRunner® and STADIA® products

\* Application dependent

# Specifications



## DIAGNOSTICS

Startup, Local/Remote Channel Loopbacks,  
Local/Remote Composite Loopbacks

## MANAGEMENT OPTIONS

MICOM's PC-based NETMan network management system; a local/remote terminal

## PHYSICAL DIMENSIONS

Width: 17.4 inches (44.2 cm)  
Height: 4.4 inches (11.2 cm)  
Depth: 11.8 inches (30 cm)  
Weight: 13 lbs (5.9 kg)

## POWER REQUIREMENTS

100-240 Vac -5%, +10%, 1-2 amps;  
47 Hz to 63 Hz, 88 watts maximum power supply

## OPERATING ENVIRONMENT

Temperature:  
32° to 122° F (0° to 50° C) operating  
-40° to +158° F (-40° to +70° C) storage

## Humidity:

10% to 90% relative humidity (noncondensing) operating  
0% to 95% relative humidity (noncondensing) storage

## AGENCY COMPLIANCE

FCC Part 15 Level A, FCC Part 68,  
C.R.C., c. 1374  
EN55022 (CISPR 22 Level B)  
EN50082-1:1992 (contact MICOM for  
IEC801/EN55024 compliances)  
UL 1950:1993  
CSA Standard C22.2 No. 950:1993  
IEC 950:1991+A1:1992  
TUV: EN60950:1992, EN41003:1993,  
BABT/BS-340  
EU Declarations of Conformity  
ISO 9001 Certified




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