

# MICOM MARATHON<sup>®</sup> 5KT Pro

## Integration Multiplexer

The Marathon 5KT Pro is one of a full family of industry-leading Integration Multiplexers offering cost-effective solutions for small to enterprise-sized networks.



Branch or Headquarters Data, Voice/Fax and LAN Integration

## Features

- Integrates legacy data with LAN and voice/fax traffic over a common private leased line, ISDN, or frame relay link for cost savings
- Supports up to three leased line WAN links or up to four frame relay WAN links
- Locally-attached frame relay devices can transparently pass traffic to the frame relay network, protecting your capital equipment investment
- New 8 Kbps G.729-based ClearVoice<sup>™</sup> technology transmits telephone conversations with toll quality while consuming minimal bandwidth
- Asynchronous port switching and contention allow remote users to easily share resources
- Bandwidth Management features dynamically increase and decrease leased line bandwidth to meet peak traffic demands
- Modular 5-slot design supports optional Integration Router Module, Remote Terminal Server, Integral Hub Module, voice/fax and legacy data expansion
- Optional Digital Direct Series provides high-density voice compression and T1/E1 digital interfaces to PBX and WAN
- Synchronous channel speeds up to 512 Kbps using premises frame relay or 64 Kbps for other protocols
- Supports MICOM NETMan<sup>™</sup> network management system
- Three-year hardware warranty

# Overview

The Marathon 5KT Pro supports up to three leased line WAN links or up to four frame relay WAN links, making it ideal for small, hub-site applications or as a feeder into enterprise networks. Marathon 5KT Pro utilizes either private leased lines or frame relay services, or a combination of both, for cost-effective integrated communications.

For public or private frame relay access, the Marathon 5KT Pro allows integrated communications traffic to travel over a common Private 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 5KT Pro 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.

MICOM™ *MicroBand* ATM protocol allows optimal throughput for legacy data, voice, fax, and LAN traffic over private leased lines. Enhanced Bandwidth Management features accommodate the peak usage requirements of multimedia traffic on leased lines by automatically increasing bandwidth when needed based on demand or time-of-day configurations.

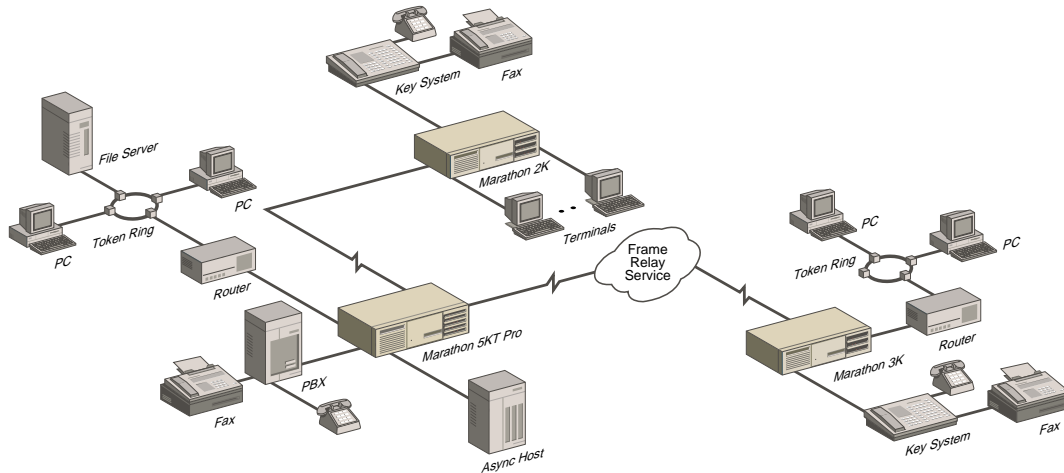
The Marathon 5KT Pro supports ClearVoice technology, based on the International Telecommunications Union's (ITU) G.729 standard for voice compression. A new, more powerful digital signal processor and advanced voice algorithm provide toll-quality voice at unprecedented 8 Kbps compression rates. Silence suppression and other bandwidth efficiencies further reduce the average consumed voice bandwidth by more than half.

The Marathon 5KT Pro handles virtually all legacy data protocols, including DEC VT100, H-P ENQ/ACK and SNA/SDLC. A five-slot modular designed chassis allows easy expansion for up to 41 asynchronous channels or 12 synchronous channels. Other optional expansion modules provide remote users with access to Ethernet LAN-based services or Ethernet LAN routing capabilities.

The high-performance  
Marathon 5KT Pro  
delivers dramatic cost  
savings by integrating  
legacy data with voice/fax  
and LAN traffic.

# Specifications

## Marathon 5KT Pro in a Hybrid Network that Combines MicroBand ATM Private Leased Lines and Frame Relay Links



### COMPOSITE WAN LINKS

#### Port A1

Female DB-25, strap-selectable as EIA 232 (CCITT V.24/V.28), V.35, X.21; configured as DCE; serial synchronous; internal/external clocking; full-duplex

#### Ports A2-A6

Female DB-25, EIA 232 (CCITT V.24/V.28); configured as DCE; serial synchronous; internal/external clocking; full duplex

### MicroBand ATM LEASED LINE ACCESS

3 Primary Links; 2 Secondary Links  
Access Rates: up to 128 Kbps

### FRAME RELAY ACCESS (Ports A1-A4)

4 Physical Links configurable up to 64 PVCs\*  
Access Rates: 56 Kbps up to T1, 64 Kbps up to E1  
Maximum Sustained Throughput: Up to 650 Kbps

Topologies Supported: String, Star, Delta, Partial Mesh and Full Mesh\*

### VOICE/FAX CHANNELS

Voice/Fax Expansion Modules: CVM, TUVVM, VM, DVM, including fax switch option  
(See Voice Module data sheets for details)

Maximum Voice/Fax Channels: 30\*\*

### DATA CHANNELS

Female; full-duplex; configured as DCE

Maximum Async Data Channels: 41  
Maximum Sync Data Channels: 12  
Data Expansion Modules Supported: 5000E/6, 5000E/12, 5000E/12LD, 5000E/6A  
(See Data Modules data sheets for details)

### Data Rates:

Async: Up to 38.4 Kbps

Sync: Up to 64 Kbps

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

### Protocols Supported:

Most standard async and sync protocols

### OPTIONAL MODULES

Voice/Fax Expansion Modules  
Data Expansion Modules  
T1/E1 Digital Direct Series  
Integration Router Module (IRM)  
Remote Terminal Server (RTS)  
Integral Hub Module (IHM)  
(See Optional Modules data sheets for details)

### COMPATIBLE MICOM PRODUCTS

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

### SOFTWARE UPDATES

Dual-Bank, Flash Memory built in for non-disruptive code download

### MANAGEMENT OPTIONS

MICOM's PC-based NETMan network management system; a local/remote terminal; using IRM option and an SNMP-based console (public domain, MIB II, monitor mode)

\* Application dependent  
\*\* With Digital Direct Series

# Specifications

**Expansion  
Module Slots**

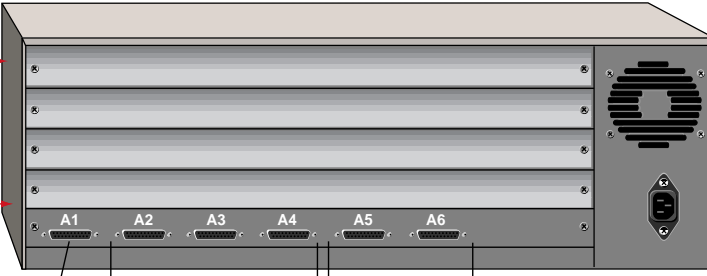
**LAN**  
Integration Router Module  
Maximum: 2  
Remote Terminal Server Module  
Maximum: 2  
Integral Hub Module  
Maximum: 2

**Data**  
6 Ch. Sync/Async; Maximum: 3  
6 Ch./12 Ch. Async; Maximum: 3

**Voice**  
VM, CVM, TUVM,  
including fax switch option  
Maximum: 8 voice channels  
per base unit

**Digital Direct Series**  
TAM/EAM; Maximum: 1  
DVEM; Maximum: 2  
DVM; Maximum: 30

**Model 5KT Pro**



WAN	WAN/Sync/Async/Backup	Sync / Async				
128K	64K	64K	—	—	—	MicroBand ATM
T1/E1	F-T1	F-T1	F-T1	—	—	Frame Relay
—	64K	64K	64K	64K	64K	Sync
—	38.4K	38.4K	38.4K	38.4K	38.4K	Async
—	128K	64K	64K	—	—	Backup (MicroBand ATM)

(Application Dependent)

## DIAGNOSTICS

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

## PHYSICAL DIMENSIONS

Standalone:

Width 17.5 inches (44.5 cm)  
Height 6.5 inches (16.5 cm)  
Depth 12.0 inches (30.5 cm)  
Weight 22 lbs. (10 kg)

With Redundant Power Supply:

Width 17.5 inches (44.5 cm)  
Height 10.75 inches (27.3 cm)  
Depth 12.0 inches (30.5 cm)  
Weight 27 lbs. (12 kg)

## POWER REQUIREMENTS

100 - 240 Vac -5%, +10%,  
1.5 - 3 amps maximum; 47 to 63 Hz,  
135 watts maximum  
-24 or -48 Vdc, 3 amps maximum

## 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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