

MICOM MARATHON[®] 20K Pro

Integration Multiplexer

The Marathon 20K Pro is the highest performing member of industry-leading Integration Multiplexers offering cost-effective solutions for medium- to large-size networks.



Headquarters Legacy Data, Voice, Fax and LAN Integration

Features

- Integrates LAN, voice/fax and legacy data traffic over a common private leased line, ISDN or private and public frame relay links for substantial cost savings
- Provides up to six WAN links for headquarters, regional or distributed hub applications
- Locally-attached frame relay devices can transparently pass traffic to the public frame relay network, protecting capital equipment investment
- Superior 8 Kbps ClearVoice™ technology ensures toll-quality telephone conversations while consuming minimal bandwidth
- Asynchronous port switching and contention allow remote users to easily share async resources
- Modular 5-slot design supports optional Integration Router Module, Remote Terminal Server, Integral 10Base-T Hub, voice/fax, high-density voice compression and legacy data expansion modules
- Digital Direct Series provides high-density voice compression and T1/E1 digital interface to PBX and WAN
- Synchronous channel speeds up to 512 Kbps using premises frame relay or 64 Kbps for all other protocols
- Allows cost-effective time-of-day WAN access and dynamic bandwidth management to meet peak multimedia traffic demands
- Supports PC-based NETMan™ and terminal-based network management systems
- Three-year hardware warranty

Overview

The high-performance Marathon 20K Pro delivers dramatic cost savings by integrating legacy data with voice/fax and LAN traffic. Supporting up to six WAN links, the Marathon 20K Pro is ideal for headquarters site applications in medium- to large-size networks. The Marathon 20K Pro utilizes either private leased lines or private and public frame relay services, or a combination of both, for cost-effective internetworking.

[™]*MicroBand* ATM cell relay allows optimal throughput for legacy data, voice, fax and LAN traffic over private leased lines. Flexible bandwidth management features accommodate peak usage on leased lines by automatically increasing bandwidth over ISDN lines or dial-up connections. This function is performed as needed based on demand or time-of-day configurations. An optional redundant power supply and built-in *MicroBand* ATM backup links provide increased network resiliency.

For private or public frame relay access, the Marathon 20K Pro allows integrated communications traffic to travel over a common Permanent Virtual Circuit (PVC). Multiple frame relay links can be configured to segment traffic for access to multiple private or public frame relay carriers. The 20K 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.

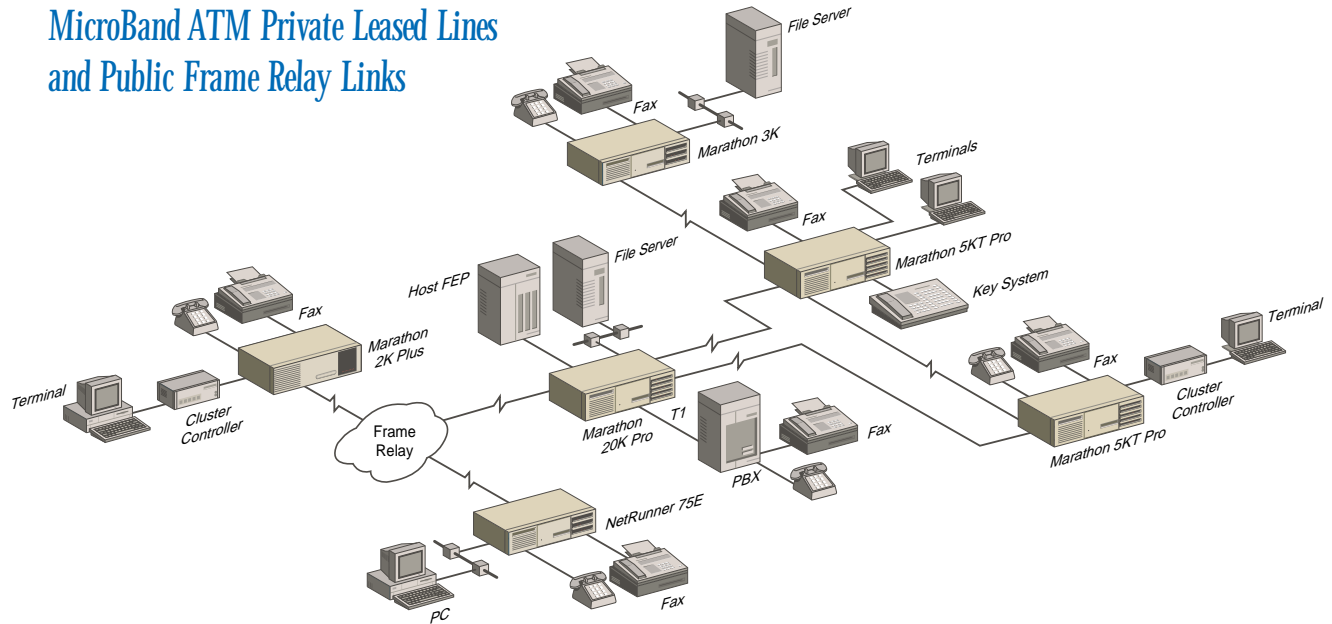
The Marathon 20K Pro supports ClearVoice technology, based on the International Telecommunications Union (ITU) G.729 standard for WAN voice compression. A new, more powerful digital signal processor and advanced algorithm provide toll-quality voice at 8 Kbps compression rates. Silence suppression and other bandwidth efficiencies reduce the average consumed bandwidth by 50% or more.

The Marathon 20K Pro provides a five-slot modular design, which allows easy expansion for up to 41 asynchronous channels and 18 synchronous channels. Optional modules also provide remote users with access to Ethernet LAN-based services including Ethernet LAN routing capabilities.

The high-performance
Marathon 20K Pro offers
robust integration and
connectivity for unbeatable
cost savings.

Specifications

Marathon 20K Pro in a Hybrid Network that Combines MicroBand ATM Private Leased Lines and Public 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

6 Primary Links supporting access up to 128 Kbps*
6 Secondary Links

FRAME RELAY ACCESS (Ports A1-A6)

6 Physical Links configurable up to 128 PVCs*
Access Rates: 56 Kbps to 1.920 Mbps
Maximum Sustained Throughput: Up to 750 Kbps

Topologies Supported:

String, Star and Delta (Frame Relay and MicroBand ATM)
Partial Mesh and Full Mesh (MicroBand ATM)

VOICE/FAX CHANNELS

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

Maximum Voice/Fax Channels: 30**

DATA CHANNELS

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

Maximum Async Data Channels: 41
Maximum Sync Data Channels: 18

Data Expansion Modules Supported: 5000E/6, 5000E/12, 5000E/12LD, 5000E/6A, 5000E/6DMA

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; 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
Integral Hub Module
Remote Terminal Server
(See Optional Modules data sheets for details)

COMPATIBLE MICOM PRODUCTS

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

SOFTWARE UPDATES

Optional Dual-Bank FlashPak allows network-wide software code downloads

MANAGEMENT OPTIONS

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

*Application dependent

** With Digital Direct Series

Specifications

Expansion Module Slots

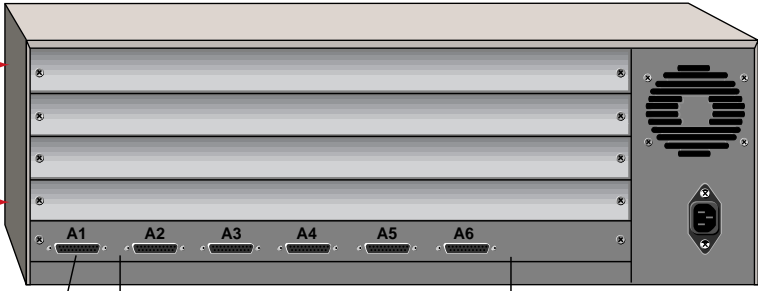
LAN
Integration Router Module; Maximum: 2
Remote Terminal Server Module; Maximum: 2
Integral Hub Module; Maximum: 4

Data
6 Ch. Sync/Async; Maximum: 3
6 Ch./12 Ch. Async; Maximum: 4

Voice
VM, TUVVM and CVM, including fax switch option; Maximum: 8 voice channels per base unit

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

Marathon 20K Pro



WAN		WAN/Sync/Async/Backup				
256K	128K	128K	64K	64K	64K	<i>MicroBand ATM</i> <i>Frame Relay</i> <i>Sync</i> <i>Async</i> <i>Backup (MicroBand ATM)</i>
T1	F-T1	F-T1	F-T1	F-T1	F-T1	
-	64K	64K	64K	64K	64K	
-	38.4K	38.4K	38.4K	38.4K	38.4K	
-	128K	128K	128K	128K	128K	
(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,
 -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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