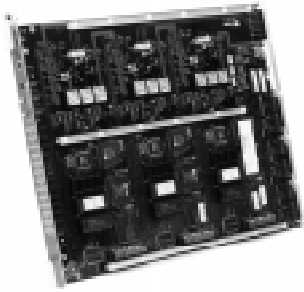# **Multi**Modem**Manager**™ Modems

Models and Description:

- MT2834MR - Enhanced V.34/V.17 three-modem card for dial-up, 2-wire, or 4-wire leased lines with dial-backup.
- MT2834MR-PSTN - Enhanced V.34/V.17 three-modem card for dial-up lines only.
- MT2834MR6 - Enhanced V.34/V.17 six-modem card for dial-up lines only.
- MT2834MRI - International MT2834MR (available in many country-specific models).

General Description:

SNMP-controllable three- or six-modem card for datacomm or faxing through the MultiModemManager™.

The MultiModemManager is a high-density rackmount modem system that accommodates 48 or 96 modems per system and supports the networking and management of an unlimited number of systems through any Ethernet network, including the Internet. One system consists of a starter kit (which includes a CC4800 card cage, an MR4800 or MR4800E controller, power supply, and MMMSNMP software) and one to sixteen three- or six-modem cards.

The MR-Series modem cards derive power and make connections with the serial devices and phone lines via a CC4800-series card cage. They communicate through the backplane with the controller, which in turn connects to a proprietary management network (MR4800) or directly to the Internet (MR4800E). Each card is designed with circuit protection for "hot-swapping" (exchanging a modem card while the system remains powered up).

Each MR-Series modem card supplies three or six enhanced V.34 (33.6K bps) modems that also support V.17 and Group 3 faxing (14.4K / 9600 bps). Each modem supports V.42/V.42bis and MNP® Classes 3-5 error correction and data compression for effective throughputs to 115.2K bps (enhanced V.34 with V.42 & V.42bis), remote configuration, callback security, DTMF tone detection, and is distinctive-ring ready. Each modem (except model MT2834MR6) also supports Multi-Tech's patented UUCP Spoofing, AS/400 settings, and Caller ID reporting.

Each MR-Series modem responds to commands from the serial device, from the password-protected remote-configuration program, or from the controller. They provide information to any MIB-II compliant SNMP manager via the management console (MR4800) or controller card (MR4800E). They also include Flash Memory for data pump and controller firmware upgrades.

Features:

Multi-environment, hot-swappable modem cards with Flash ROM, remote configuration, and management.

Modem Features

- Flash Memory for easy upgrades to new features and enhancements via the controller or a serial device.
- Hot-swappable design allows insertion or removal of a card without "downing" the system.
- SNMP compliance allows modems to be managed from any MIB-II compliant agent via the management console (MR4800) or vontroller card (MR4800E).
- Speed Detection automatically detects and adjusts modem speed.
- Remote Configuration allows password-protected access to modem parameters and diagnostics.
- Callback security facilitates tracking modem by user and ensures only authorized callers access the serial devices.
- Fallback forces the modem to reduce modem speed (in 2400 bps steps) when line conditions deteriorate, rather than disconnecting. Modem speed automatically increases (in 2400 bps steps) as line conditions improve.
- "AT command" compatible, autodial, redial, repeat dial, pulse or tone dial, dial pauses, call status display, auto-parity and data rate selection, keyboard-controlled modem options, nonvolatile memory for modem settings, diagnostics listing, and help menus.
- Diagnostics: Local Analog Loop, Local Digital Loop, Remote Digital Loop, Automatic Self Test on Power-Up.
- DTMF tone recognition and passthrough and Distinctive-ring ready.
- All models except MT2834MR6 support Caller ID reporting on lines with Caller ID service and patented UUCP spoofing.
- Windows 95 auto detection supported.

Facsimile Features

- Responds to EIA TR.29 Class 2 commands.
- Auto-detects 1D or 2D (modified read) fax format.
- Receives in "Fax only", "data only", or "auto-detect" mode (auto-detect mode requires the sending fax to issue "CNG" tone).

Specifications:

Datacomm speeds to 115.2K bps and faxing to 14.4K bps.

Data Rates:	33.6K, 31.2K, 28.8K, 26.4K, 24K, 21.6K, 19.2K, 16.8K,14.4K, 12K, 9.6K, 4.8K, 2.4K, 1.2K, and 0-300 bps
Fax Speeds:	14.4K, 9600, and 4800 bps
Buffer:	60 command characters
Flow Control:	Xon/Xoff, RTS/CTS, or ENQ/ACK
Data Format:	Serial, binary, sync or async
Operation:	Full duplex over dial-up lines. Supports 2- or 4-wire leased lines (except MT2834MR-PSTN and MT2834MR6) with dial-backup when installed in CC4800-21card cage
LEDs:	Send, Receive, Carrier Detect, Data Rates, Off Hook, Terminal Ready, Error Correction, Fax, Test, and Out of Service

Standards

Datacomm:	Enhanced V.34, V.34, V.32bis, V.32, V.22bis, & V.22. Bell® 212A & 103 (except MT2834MRI). V.21 & V.23 (MT2834MRI only) for 0-300 & 1200 bps
Fax:	V.17 & Group 3; in 1D or 2D formats
Integrity:	V.42 LAP-M and MNP Classes 3&4 error correction
Compression:	MNP 5 (2-to-1) and V.42bis (4-to-1)

Electrical / Physical

Dimensions:	0.9" W x 11.0" H x 15.0" L 2.2 x 27.9 x 37.2 cm
Weight:	2.5 lbs. (1.1 kg.)
Cables:	3 "Y" cables for A&B, C&D, E&F serial port connections (MT2834MR6 only)
Transmit Level:	-10 dBm (dial-up); 0 dBm (MT2834MR) or -9 dBm (MT2834MRI) leased line
Temp.:	32° to 120°F (0° to 50°C)
Humidity:	20-90% (non-condensing)
Freq. Stab.:	±0.01%
Rcv. Sens.:	-43 dBm (worst-case)
FCC #:	See Owner's Manual
REN:	See Owner's Manual
Warranty:	Two years

Manufactured in Mounds View, MN, U.S.A.

Individual spec sheets are available for the MultiModemManager hardware (card cage, controller, and power supply) and software.

MultiTech® Systems

The right answer every time.