Dial-Up Modems

RayTel Myriad MD Modular Design Industrial Modem System. Modem Cards, Racks and Mounts.

The Myriad MD is a Series of Modems created as a "Modular Design (MD)". The series includes a range of modem cards that can fit into racks, standalone/din-rail enclosures for industrial uses cases.

Overview

THE MODEMS

The Myriad MD (Modular Design) includes a series of modem cards that fit into slots of an 18 slots rack or into an Industrial Modem Enclosure. The modem cards include a wide range of dial-up, leased-line or pilot-wire modems.

Features

- **Flexible Modular Form Factor** - A standard form factor modem card is packaged for either central or remote locations reducing the need for multiple spares.
- **Central & Remote** - Takes advantage of the wide range of universal modem cards supported by the Myriad Modem Nest (Central) and IME Enclosure (Remote) enabling easy installation and maintenance.
- **Wide Range of Modems** - A wide range of modem cards ranging from BELL 202T (1200bps) to V.92 (56 Kbps), Dial and Leased Line, offer unprecedented support for all applications. Each modem offers a full array of status LEDs.
- **Purpose Built** - Specially designed for substation or remote communications use cases. Uses standard terminal posts for line connection.
- **High Density Rack** - The Myria High-Density Rack for Central installation supports up to 18 Modems.
- **Single Card Remote** - The Myriad Industrial Modem Enclosure (IME) supports Standalone, Wall-Mount, or DIN Rail installation.
- **Flexible Power Options** - Offering multiple power options, 9 - 36VDC or 48 - 240 VAC/VDC. Single or Dual Power Supplies (Auto Back Up).

Modem Product Options	
Myriad MD202T	**Myriad MD14.4**
• 0-1200bps Over Voice Grade Leased Lines • Point-to-Point or multi-point • -48 to 220V AC/DC Power Supply • -9 to -36VDC Optional Power Supply • IEC801-4 Surge Protection • -40°C to +85°C Operating Temp	• 2.4, 9.6, 14.4 & 28.8 kps Modems • Fast Poll Digital 9.6kps (MIU9.6FPD only) • 48 to 240VAC/DC Power Supply • IEC801-4 Surge Protection • -40°C to +85°C Operating Temp
Myriad MD9612FP	**Myriad IGM-HXII56RM**
• Dual Mode: 9600/4800 bps and FSK, Bell202T 0-1800bps • Designed for high speed or an unlimited number of drops • Fast train modem equalizer with 23 msec RTS/CTS delay • DSP design with automatic adaptive equalizer • Leased line interface protected with heavy-duty surge protection	• Dial up phone lines up to 56Kbps • 2 Wire leased line • Fast POS V.22bis Fast connect • HX Telco line surge protection • V.44 & V.42bis data compression • V.42 Error correction • Intelligent DAA detects line status • Extended AT Commands & NVRAM • -40°C to +85°C Operating Temp

THE INDUSTRIAL MODEM ENCLSOURE (IME)

The Myriad IME is an enclosure designed to house Myriad MD modems for use in "Remote" locations. The same cards used in the Rack System can be field deployed into the IME.

The IME can be used as a Standalone, Wall Mount, Din Rail flat-mount, Din Rail side-mount or with a variety of other mounting options including a 2-unit 19" rack shelf.

The IME is available with various power supply options including a 9 - 36VDC or 48 - 240 VAC/VDC and comes with a standard RS232 (DB25 DTE port) and a Screw Terminal for the analog interface.

THE RACK MOUNT CHASSIS

The Raymar-Telenetics Myriad Rack Mount Modem Bank is an industrial grade, 19" 3U (5.25"H) chassis with slots for 18 modem cards and 2 power supply cards. The eighteen slots are provided for front-loading, hot-swappable modem cards. Each card can accommodate any one of the Raymar-Telenetics' (MD) modem cards listed on the modem table.
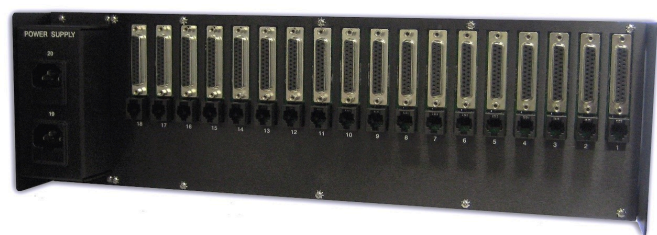

The Myriad can be powered from a wide range of AC or DC voltages. Two power supply cards can be installed to provide automatic back up in the event the primary power supply fails. A single power supply card will power all 18 modem cards. A second power supply card, if installed, provides automatic backup in the event of a failure of the primary power supply.

The Myriad will operate in temperatures from -20° to 85° C and is surge protected on both the power and analog lines.

The backplane connectors are standard DB25F serial ports and RJ 11 analog ports. Power connectors are screw

terminals for DC and fused sockets (IEC 320) for AC.

Specifications

	MD202T	MD14.4	MD9612FP	IGM-HXII56RM
Modem Line Speeds: Asynchronous	0 to 1200 bps over voice grade leased lines or pilot wires	14400, 9600, 4800, 2400, 1200, 300bps	Bell202T 0 to 1800bps, Raymar-Telenetics 4800bps ,9600bps	56,000, 33,600, 31,200, 28,800, 26,400, 24,000, 21,600, 19,200, 16,800, 14,400, 12,000, 9,600, 7,200, 4,800, 2,400, 1,200, 0-300 bps
DTE Rates: above modem line speeds (i.e.; with data compression)	N/A	57600, 38400, 19200, 14400, 9600, 4800, 2400, 1200, 300bps	N/A	115200, 57600, 38400, 19200, 14400, 9600, 4800, 2400, 1200, 300bps
Standards	Bell 202T (V.23 available by special order) Phase Coherent, Frequency Shift Keyed (FSK)	V.32bis, V.32, V.22Bis, V.22, Bell 212A, Bell 103	Bell202T, V.23, RayTel Proprietary Modulation	V.92, V.34 enhanced, V.34, V.32bis, V.22bis, V.22, Bell 212A and 103/113, V.21 & V.23
Dial Up	N	MD14.4	N	Y
2 & 4-Wire Leased Line	2-wire half-duplex or 4-wire full-duplex	MD14.4L	2-wire half-duplex or 4-wire full-duplex	2 Wire Leased
Compatibility	BEL202T	Hayes™ Extended AT Command Set	Bell202T, V.23, RayTel Proprietary	V.92, V.34, V.32Bis, V.22Bis, Bell 212A, Bell 103, V.21 & V.23
Error Correction/Data Compression	N/A	MNP Class 2-4, MNP 10, V.42, MNP 5, V.42bis	N/A	ITU-T V.44 (6:1 throughput), V.42bis (4:1 throughput), MNP 5 (2:1 throughput)
Environment	-40°C to +85°C, 0 to 95% humidity (non-condensing)			