

2nd GENERATION MIU INDUSTRIAL HARDENED MODEM INTERFACE UNITS 0-1200bps, Leased Line

AC/DC Powered
Bell 202T or V.23



KEY FEATURES

- 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.
- For Meters, RTUs, SCADA, etc.

The MIU202T is a Bell Standard 202T modem designed for asynchronous operation at 0 to 1200bps over voice grade leased lines and pilot wires. If required, a V.23 (1200bps) model is also available by special order. Ask for the MIU23.

The modem is intended for use on leased lines and private lines providing half duplex communications on 2-wire lines, or full duplex communications on 4-wire lines.

Most modem manufacturers have abandoned Bell 202T in favor of the much higher speed modulation preferred in dial-up systems. However, Bell 202T remains the standard of choice in many utility and industrial applications where relatively small amounts of data are to be transmitted in multi-point networks.

To meet this continued demand, **Raymar-Telenetics** has added the MIU202T to its range of Communication Interface Units.

The MIU202T can be powered from any AC or DC voltage in the range -48V to 220V. A -9 to -36VDC version is also available. It is designed to work in extended temperatures ranging from -40°C to +85°C, and is surge protected to 8kV, double the voltage requirements of IEC801-4 standard.

All of this is bundled in a 5-3/8" x 4" x 1-3/8" non-metallic enclosure, suitable for desktop or wall mounting. Rack mount cards are also available for the **Raymar-Telenetics** Myriad™ system.



Bell 202T continues to be the standard of choice in many utility and industrial multi-drop data communications applications.

The **Raymar-Telenetics** MIU202T can be powered from a wide range of AC and DC voltages, is surge protected on both the power and analog lines, and will operate in extreme temperatures.

Ideal for multi-drop applications over leased lines and private lines.

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Industrial Hardened Modem Interface Unit (MIU) upgrade.

The Newly released 2nd Generation MIU features several improvements based on feedback from a variety of installations. The MIU first released over a decade ago has been an integral part of thousands of networks. Our engineers took advantage of the experience and feedback from customers to improve and extend the functionality of this highly respected product line. This upgraded product will replace the historical models of the MIU modems for all future orders.

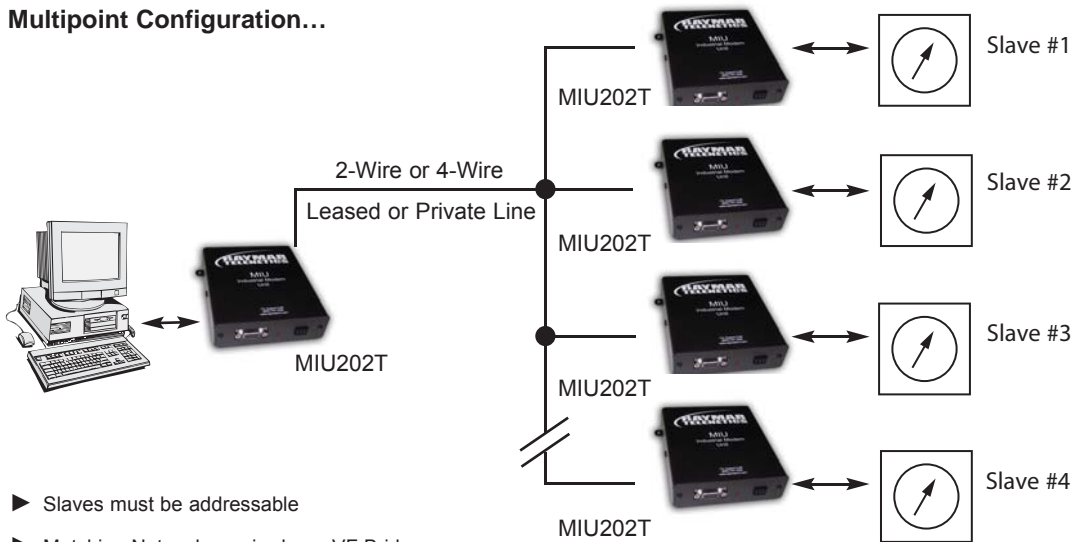
The baseboard (Interface card) has been migrated to SMD technology along with several design improvements to circuit isolation reducing the susceptibility of the product to externally generated damages, i.e. power fluctuations, surges on the power interface. The new aluminum enclosure features wall mounting flanges and the ability to add a DIN Rail clip to simplify installations.

MIU 202T Modem / 0-1200bps, Leased Line AC/DC Powered Substation Hardened / Bell 202T or V.23

TECHNICAL SPECIFICATIONS

Data Rate: Asynchronous:	0 to 1200 bps over voice grade leased lines or pilot wires		
Modulation:	Bell 202T (V.23 available by special order) Phase Coherent, Frequency Shift Keyed (FSK)		
Operation:	Full Duplex Over 4-Wire Leased or Private Lines, Half Duplex Over 2-Wire Leased or Private Lines (Constant or Switched Carrier, DIP Switch Selectable)		
Power Supply:	-48VAC/DC to 220VAC/DC (Optional -9 to -36V DC)		
Power Consumption:	15mA @ -48V DC; 7.5mA @ 115V AC; 7.5mA @ 125V DC		
Digital Port:	RS232 with DB9 Connector		
Analog Port:	RJ-11		
Power Connector:	3-pin with Screw Terminals for Customer Supplied Cable		
Surge Protection:	Power Line: 8kV (Exceeds IEC801.4) / Analog Line: 3.75kVac		
Operating Environment:	-40°C to +85°C, 0 to 95% humidity (non-condensing)		
Case Size/ Weight:	Size: 5-3/8" x 4" x 1-3/8" Weight: 1 lb		
Carrier Frequencies:	Bell 202T:	Mark 1200Hz ± 0.1% Space 2200Hz ± 0.1%	V.23: Mark 1300Hz ± 0.1% Space 2100Hz ± 0.1%
Line Impedance:	600 ohms	Antistreaming:	45 seconds or None
Transmitter Output Level:	0 or -10dBm	Receive Sensitivity:	-33 or -43dBm
RTS/CTS Delay:	1, 12, 35 or 50msec	Carrier Detect Delay:	8.5msec
Soft Carrier Turnoff:	8.3msec	Test Features:	Analog Loopback

Multipoint Configuration...



- ▶ Slaves must be addressable
- ▶ Matching Network required, eg; VF Bridge (Not supplied by Raymar-Telenetics)



Manufactured in the USA by RAYMAR-TELENETICS

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WARRANTY

Raymar-Telenetics manufactured products are warranted against defects in hardware material and workmanship under normal use for one (1) year from date of original retail purchase. Defective product will be repaired or replaced, determination to be made by Raymar-Telenetics, at no charge. Repaired or replaced products are warranted for 90 days or for original warranty period, whichever is longer. Warranty extends to original end-user only.