

RS-530/RS-232 MicroModems

M62xx / M82xx
RS-530 / RS-232
FIBER OPTIC MICROMODEMS

Product Features

- Full Handshaking standard on all models.
- Multimode or Single Mode versions available.
- Standard or EMI/RFI Suppressed versions available.
- Small Compact Design for limited space installations.
- Mean Time Between Failure greater than fourteen (14) years.
- Fully Transparent Operation with independent data, clock and control lines.
- Installation as Modem Links (DCE-DCE) or Interface Extenders (DCE-DTE).
- Optional Use of Host Power with M82xx Series MicroModems.
- Electrical Isolation eliminates ground potential rise and provides dielectric isolation.
- Standalone or 19" rack mounting with redundant power applications.
- Extruded Aluminum Housings for better protection and extended product life.
- Standards Conversion for RS-232, RS-422, RS-423, RS-530, V.35, RS-449, MIL-188C (Unbal.), MIL-188-114 (Bal.)



Product Description

VERSITRON's M62xx and M82xx MicroModem Series provide fully transparent fiber optic transmission for data, clock and control signals. MicroModems provide synchronous or asynchronous continuously variable data transmission from 1 bps to 64 Kbps. Mode of operation is either full duplex or simplex. Small enough to install directly to data terminal and communications equipment, these modems offer versatile solutions and complete transparency for data communications. M82xx modems provide full handshaking of all control signals associated with RS-232, RS-423 and MIL-STD-188C (Unbalanced). M62xx modems provide full handshaking of all control signals associated with RS-530 (RS-422 & RS-423) and MIL-STD-188-114 Balanced. RS-449 or V.35 standards are also supported with the use of M62xx modems and adapters. Basic operation involves multiplexing the control signals along with the clock and data signals and transmitting the combined signal to the remote unit. At the remote end the combined signal is de-multiplexed and applied to the electrical interface. The electrical interface will be a DB25F (DCE) if connecting to a terminal (DTE) interface. It will be a DB25M (DTE) if connecting to a modem (DCE) interface. Two ST connectors are standard for the fiber interface.

Product Models

Model ¹	M6213 / M6223	M6214 / M6224	M6215 / M6225
Wavelength	Multimode 850nm LED	Multimode 1300nm LED	Single Mode 1300nm LED
Connectors (2)	ST	ST	ST
Link Budget	22 ± 1 dB	19 ± 1 dB	15 ± 1 dB
Operating Range	2km / 1.25mi / 6,600ft	8km / 5.0mi / 26,400ft	16km / 9.942mi / 52,500ft
Model ¹	M8213 / M8223	M8214 / M8224	M8215 / M8225
Wavelength	Multimode 850nm LED	Multimode 1300nm LED	Single Mode 1300nm LED
Connectors (2)	ST	ST	ST
Link Budget	20 ± 1 dB	18 ± 1 dB	18 ± 1 dB
Operating Range	2km / 1.25mi / 6,600ft	8km / 5.0mi / 26,400ft	16km / 9.942mi / 52,500ft

¹ - Add 'T' to any model listed when EMI/RFI suppression is required.

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Technical Specifications General

Dimensions	1.0 x 2.4 x 4.5 in. / 2.54 x 6.1 x 11.43 cm. (H x W x L)
Weight	.425 lbs / 0.2 kg
Operating Temperature	-55° to +100°C / -67° to 212°F
Storage Temperature	-60° to +105°C / -76° to 221°F
Relative Humidity	Up to 95% non-condensing
Altitude	Up to 10,000 ft

Technical Specifications Electrical Interface

Power Requirements	+5 to +15VDC @300mA
Protocol	Synchronous or Asynchronous (auto-sensing)
Date Rate	Continuously Variable from 1 bps to 64 Kbps
Operation	Full Duplex or Simplex
Error Rate	Better than 10 ⁻⁹
Connector	DCE – Female DB25 for M6213, M6214, M6215, M8213, M8214 or M8215 DTE – Male DB25 for M6223, M6224, M6225, M8223, M8224 or M8225
M62xx Digital Interface	RS-530 (RS-422 / RS-423), RS-449 or V.35 with adapter, MIL-188-114 (Balanced)
M82xx Digital Interface	RS-232, MIL-188C (Unbalanced)

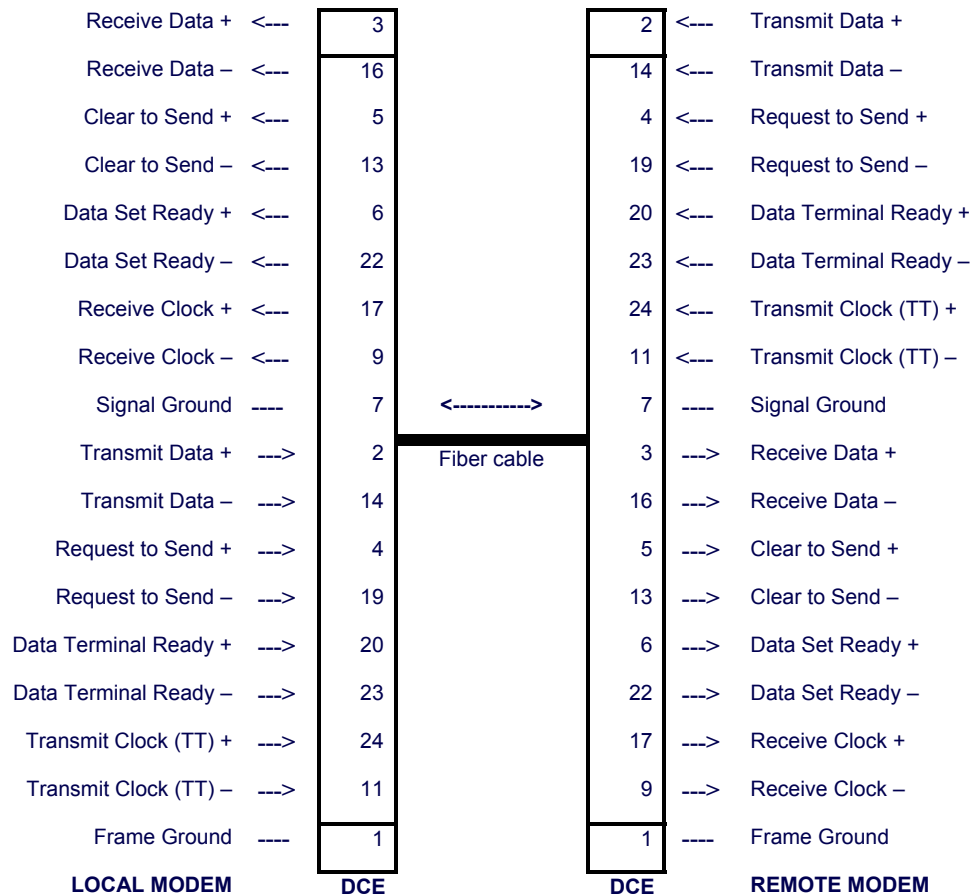
Accessories

Model #	Description
MRR-16	16-slot rack mount chassis
M0004	100-240V/1A 47-63Hz to 12VDC power supply
M0001	Power jumper 6" cable. (One per MicroModem required for chassis installations).
PSAC08	110VAC to 12VDC power adapter (USA style).
PSAC09	220VAC to 12VDC power adapter (European style).
M0011	RS-530 DCE to RS-449 DCE (female) adapter.
M0012	RS-530 DTE to RS-449 DTE (male) adapter.
M0013	RS-530 DCE to V.35 DCE (female) adapter.
M0014	RS-530 DTE to V.35 DTE (male) adapter.
M0021	DB25 gender changer, male-to-male.
M0022	DB25 gender changer, female-to-female.

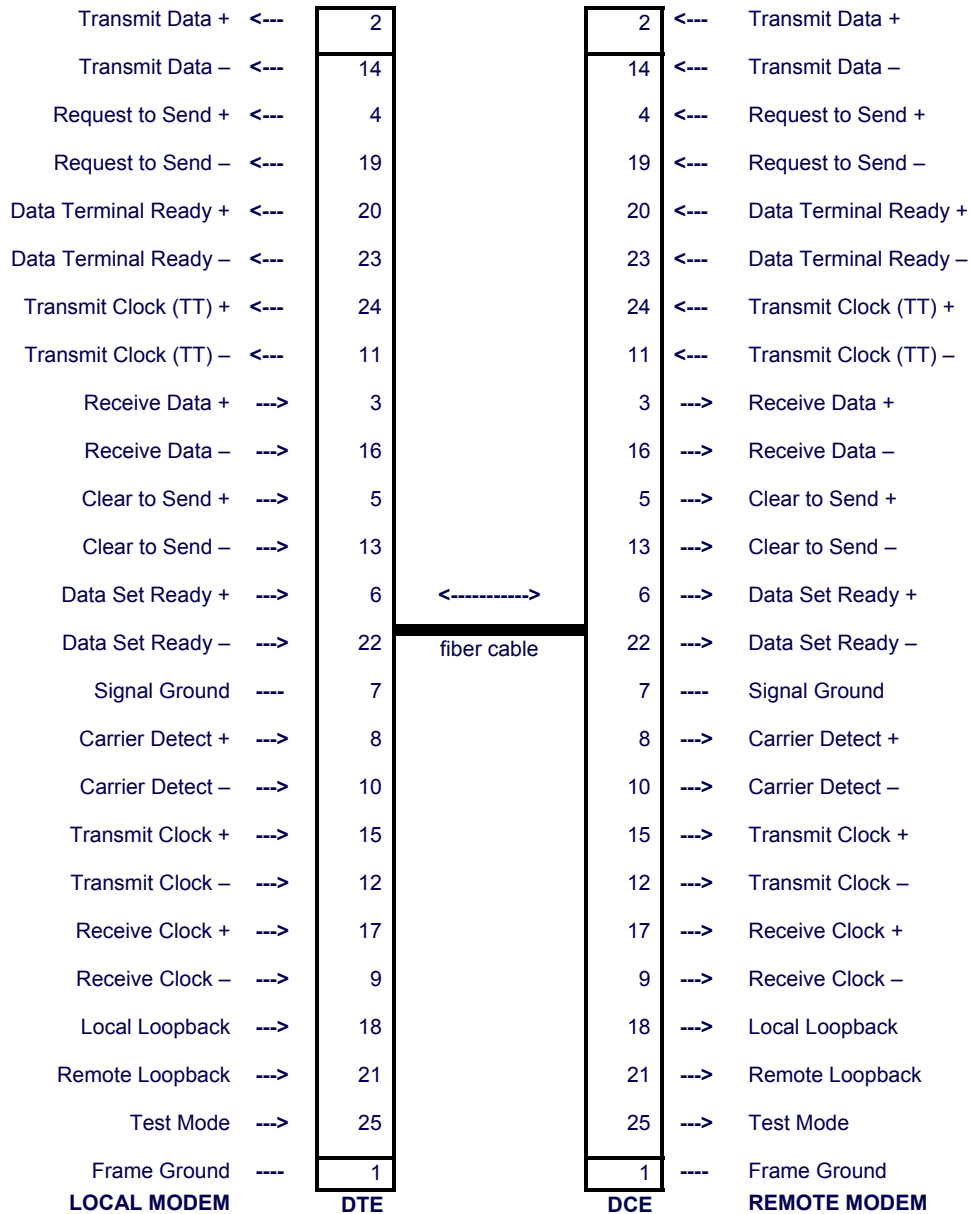
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M62xx Modem Link Pin-Out



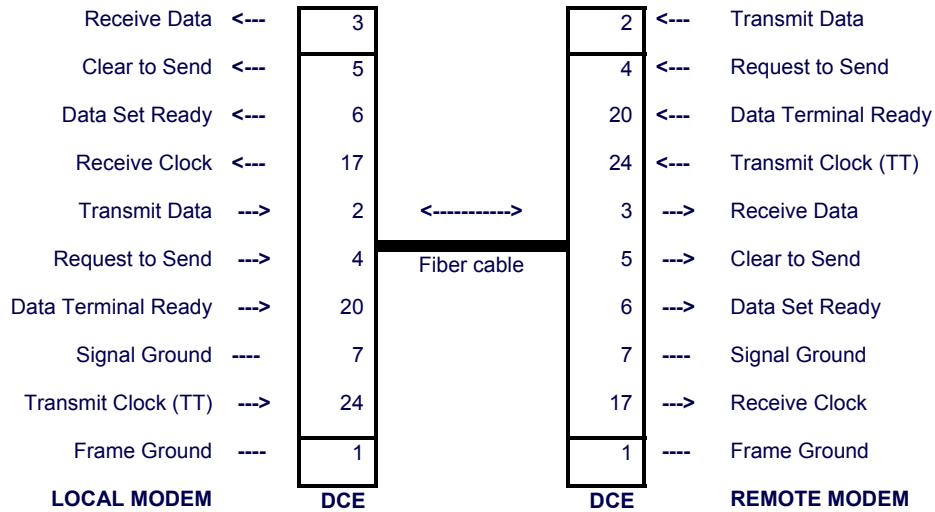
M62xx Interface Extender Pin-Out



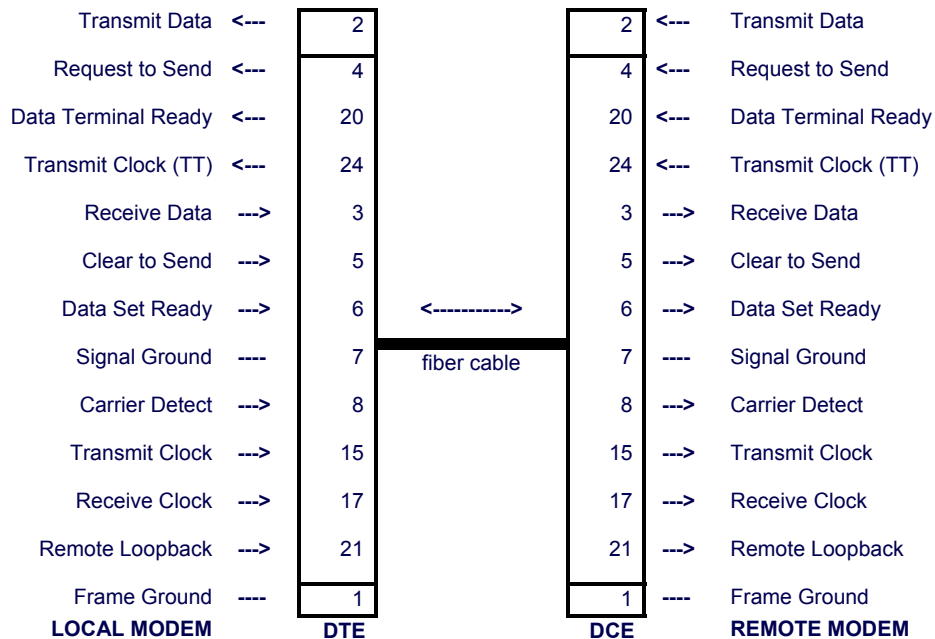
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M82xx Modem Link Pin-Out



M82xx Interface Extender Pin-Out



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Sample Installation

