



Signal Powered Limited Distance Modem

SERIAL I/O



\$96



The LDM35 Series of products is designed to allow video display terminals (VDTs) and other RS-232 devices to be connected over distances sufficient to cover any industrial or institutional complex of buildings. These modems feature a rugged enclosure small enough to mount on the back panel of VDT units, saving valuable desk and floor space.

The LDM35 Series does not require a power supply for operation. The use of low power circuits and a sensitive optical receiver allows the devices to derive all necessary

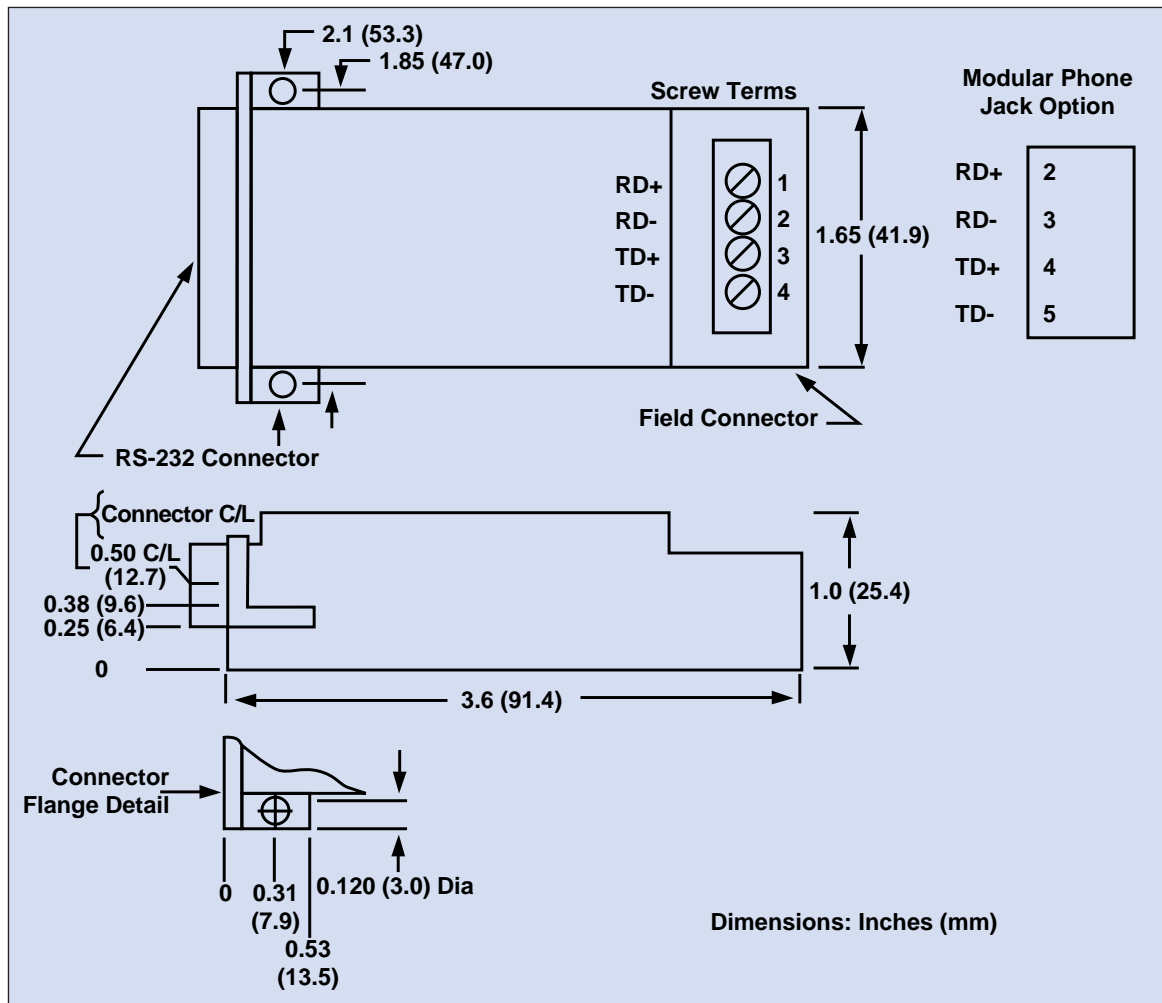
- ✓ Signal-Powered: No Power Source Required
- ✓ Optical Isolation: Breaks Ground Loops
- ✓ Heavy Duty Surge Protectors: Prevents Lightning Damage
- ✓ LED Diagnostic Indicators: Simplifies Installation and System Troubleshooting
- ✓ Operation to Two Miles (3.3 KM) at 9600 Baud, One-Half Mile (0.8 KM) at 19,200, Seven Miles (11.7 KM) at 1200 Baud
- ✓ Four-Wire Full Duplex, Two-Wire Simplex

- ✓ Selection of Connectors
- ✓ Wide Operating Temperature Range, 0 to +70°C
- ✓ Null Modem Switch

Specifications

Model	LDM35						
Baud Rate Range	0 – 19.2K						
Baud Rate	19.2K	9.6K	4.8K	2.4K	1.2K	.6K	.3K – 0
Distance (miles)	0.5	2	3	5	7	10	12
Distance (km)	0.8	3.3	5	8.3	11.7	16.7	20
Common Mode Isolation	500V Surge, 300V Continuous						
Differential Mode Surge Protection (3 devices)	ANSI/IEEE C37.90.1-1989						
Channel Lines ⁽¹⁾	TD, RD						
Control Lines ⁽¹⁾	RTS, CTS, DTR, DSR, RLSD						
Modes	Asynchronous 4-wire full duplex, 2-wire simplex						

Notes: (1) TD = Transmit Data, RD = Receive Data, RTS = Request To Send, CTS = Clear To Send, DTR = Data Terminal Ready, DSR = Data Set Ready, RLSD = Received Line Signal Detect.



power from the RS-232 data and control signal. They are designed for full-duplex, asynchronous operation over two, DC-continuity, non-loaded, twisted-wire pairs. Two-wire simplex operation may be accomplished over two wires. The modem circuits and, consequently, the host device are protected from electrical transients due to lightning strikes or operation of heavy industrial equipment.

Each device features a convenient Data-Communication Equipment (DCE) to Data-Terminal Equipment (DTE) switch which reverses pins 2 and 3 of the RS-232 connector. For installation and troubleshooting, each unit has diagnostic Light-Emitting Diodes (LEDs) on the transmit and receive lines.

The RS-232 connector may be ordered as a male or female 25-pin connector. Field connection is made through a modern, solderless, screw-termination assembly. Alternatively, a convenient four-wire modular phone jack is available.

Power Requirements

Model LDM35 is powered by the RS-232 data and control signals from its host computer or terminal device. It receives power from Data Terminal Ready, pin 20 or Request To Send, pin 4, and Transmitted

Data, pin 2. Transmitted data may be on pin 3 when the DCE/CTE switch is in the DTE position. For proper operation, minimum required signal voltage level is ± 6 V at 3.0 mA to 10.0 mA.

Model	LDM35
Power: RS-232 Data RS-232 Control Signals	RS-232 data and control signals, 3.0 mA to 10.0 mA ± 5 V to ± 15 V $+6$ V to $+15$ V, 3.0 mA to 10.0 mA
Operating Environment	0°C to +70°C, 0-95% relative humidity, noncondensing
Dimensions	3.6" x 2.1" x 1.3" (91.4 x 53.3 x 25.4 mm)
Weight	3.2 oz (90.1g) max
MTBF⁽²⁾	>150,000 hrs

Notes: (2) Ground-benign environmental conditions (no salt atmosphere, <50°C ambient temperature).

To Order (Specify Model Number)

Model No.	Price	RS232 Connector	Field Connector
LDM35-P	\$96	25 Pin male	Screw termination
LDM35-S	96	25 Pin female	Screw termination
LDM35-PJ	96	25 Pin male	Modular phone jack
LDM35-SJ	96	25 Pin female	Modular phone jack

Includes operator's manual.

Ordering Example: LDM35-S converter: \$96.