

Signal Powered Limited Distance Modem



LDM35 Series



- ✓ 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 3.3 KM (Two Miles) at 9600 Baud, 0.8 KM (One-Half Mile) at 19,200, 11.7 KM (Seven Miles) at 1200 Baud
- ✓ Four-Wire Full Duplex, Two-Wire Simplex
- ✓ Selection of Connectors
- ✓ Wide Operating Temperature Range, 0 to 70°C (32 to 158°F)
- ✓ Null Modem Switch

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.

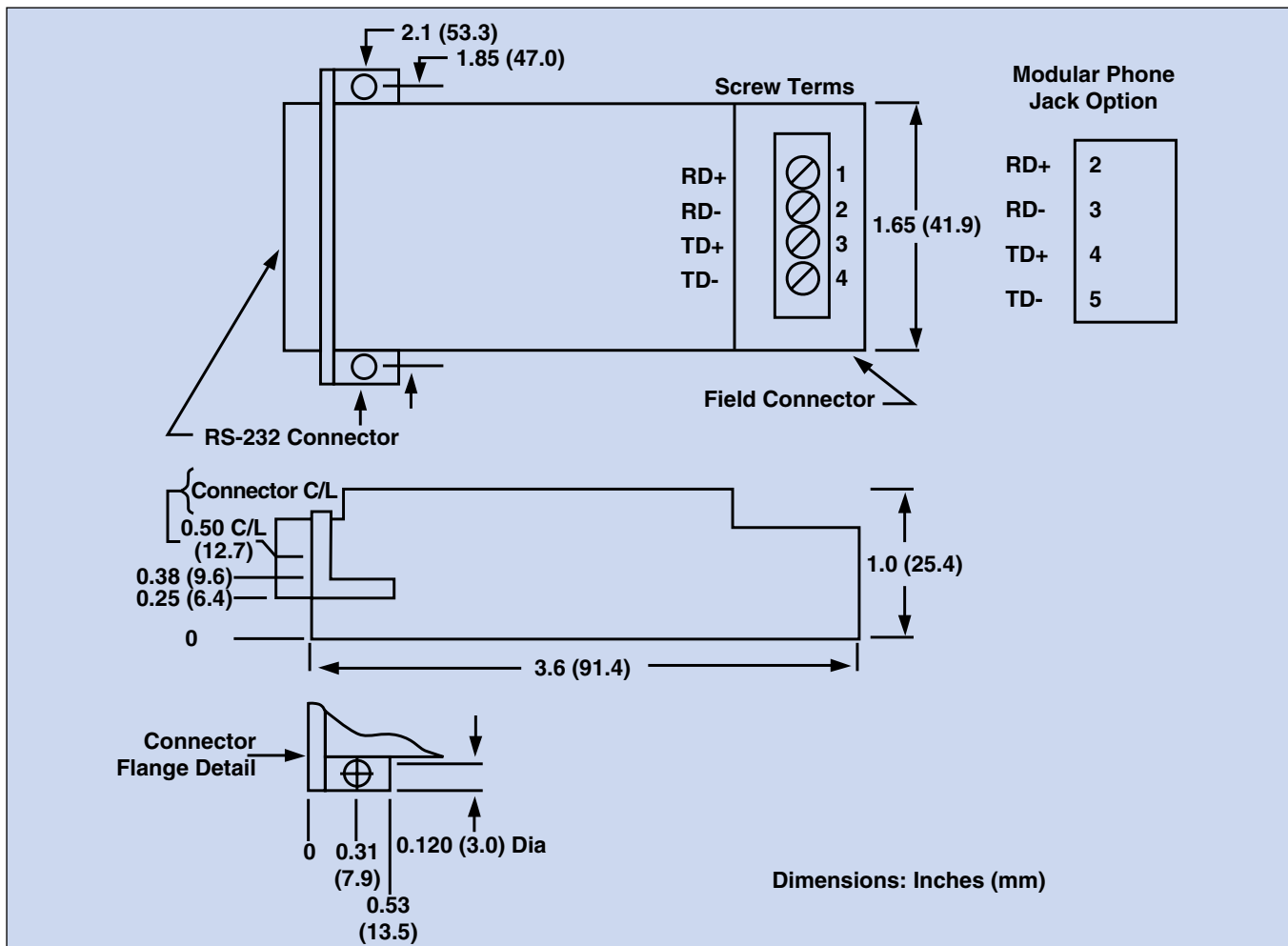
The LDM35 Series does not require a power supply for operation. The use of low power circuits and a sensitive optical receiver allows the devices to derive all necessary power from the RS-232 data and control signal.

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.

Specifications

| | | | | | | | |
|---|---|------|------|------|------|------|---------|
| 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.



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.

Specifications

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

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

To Order

| Model No. | RS232 Connector | Field Connector |
|-----------|-----------------|-------------------|
| LDM35-P | 25 Pin male | Screw termination |
| LDM35-S | 25 Pin female | Screw termination |

Includes operator's manual.

Ordering Example: LDM35-S converter and OCW-1, OMEGACARESM extends standard 1-year warranty to a total of 2 years.



OMEGACARESM extended warranty program is available for models shown on this page. Ask your sales representative for full details when placing an order. OMEGACARESM covers parts, labor and equivalent loaners.