

DLM4500

DIAL-UP / LEASED LINE MODEM



Data-Linc Group's DLM4500 voice band modem offers maximum versatility and reliability in remote process control and data acquisition. From dial-up, leased and private line applications, the DLM4500 provides unsurpassed flexibility in any industrial application requiring extended temperatures.

The DLM4500 uses advanced Trellis coding, error correction and data compression technology for virtually error-free data communications. An uncompressed PLC line speed of up to 19.2 Kbaud is standard; however, port baud rates of 1200 through 115.2 Kbaud are also available.

The DLM4500 operates full/half-duplex on two wires. The asynchronous digital interface can be either RS232/422 or AE485. The DLM4500 Auto Answer AE485 version easily provides long distance polling of multiple PLCs at a remote site. The polling operation performed by the Master is completely transparent to the DLM4500. No additional Master programming is required—simply enter the Remote DLM4500 telephone number.

Housed in a rugged steel enclosure for optimal EMI resistance, the DLM4500 series is factory configured for trouble-free installation. No programming or configuration is required.

Auto Alarm Dial Back

An Auto Alarm Dial Back module is available on the DLM4500. This gives the remote PLC the ability to establish a data path to a master PLC or PC via a logic input from the remote PLC to the Auto Alarm Dial Back module. This could be used for remote alarming or time based data updates.

DLM4500 FEATURES

- Ideal for industrial dial-up, leased line, private line or dedicated wire applications
- Extended temperature range of -40° to +176°F (-40° to +80°C)
- Optional auto-dial module for alarm conditions or emergency calls by sensing a logic flag from the remote PLC
- Versatile, reliable and durable—designed especially for industrial applications
- Easily interfaces with most PLCs, RTUs and PCs
- Factory or field configured for your application—ensuring trouble-free installation
- Supports most serial protocols, including DF1, GE-SNP, Modbus ASCII, DNP, and Optomux. (For Modbus RTU, contact Data-Linc)

APPLICATIONS

- SCADA system communications
- Remote PLC programming and diagnostics
- Remote alarm monitoring
- PLC/RTU communications

Please contact Data-Linc for an application review.

DLM4500 SPECIFICATIONS

Compliance

EMI/RFI: FCC Part 15, Class B, DOC Class/
MDC Class B
Phone Compatibility: FCC Part 68

Ringer Equivalence
0.30B

Carrier

Trellis Coded Modulation (TCM) 1700 or 1800 Hz

Standards

Modem Communication. ITU-TSS (CCITT) V.34,
V.43bis, V.32, V.23, V.22bis, V.22 and V.21;
Bell 212A and 103/113

Error Correction. V.42 (LAP-M or MNP3-4)

Data Compression. V.42bis (4:1 throughput) MNP5
(2:1 throughput)

Interface

Telephone Line. Modular TELCO, RJ-11

Serial Port. DB9 female

Power. 2 Position Pluggable Terminal Block

Flow Control

User selectable options; function disabled at factory

Operation

Two-wire dial-up or two-wire leased lines

Modem Data Rate

Up to 33.6 Kbps with data compression, 19.2 Kbps
maximum factory speed, 9600, 4800 and 1200 bps

DTE Speeds Supported

Up to 115.2 Kbaud

Dial Type

Touch-tone

Transmission Level

-11 dBm

Receiver Sensitivity

-43 dBm

Range

20 miles* (32 km) on unloaded line, unlimited for loaded
lines and dial-up applications

Internal Memory

RAM. 60 character command buffer

NVRAM. One stored factory profile

User Controls

Standard. AT Command Set

Optional. Auto Answer/Dial Back internal discrete signal
control module

Diagnostics

Tests using &Tn

Data Connections

Standard. DB9 female DCE

Optional. Two wire AE485 or four wire RS422
(AE485 Auto Enable is RS485 compatible in most cases)

Data Format

Serial, Binary, Asynchronous 10 or 11 bit

Power

Standard. Wall mount power supply, 110/120 VAC to
9 to 18 VDC, 800 mA

Optional. 24 VDC (user supplied) power interface, two
position terminal block. 24 VDC, 300 mA

Operating Environment

Temperature. -40° to +176°F (-40° to 80°C)

Humidity. 0 to 95%, non-condensing

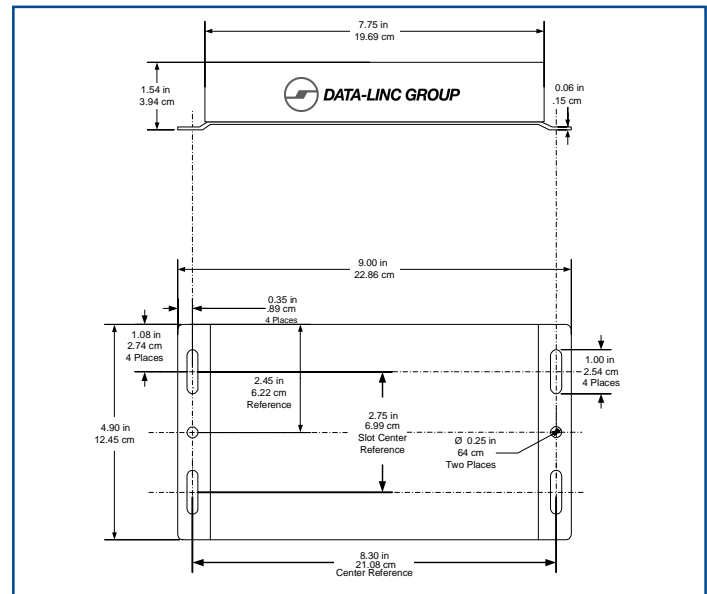
Enclosure

Standard. NEMA 1; 18-gauge steel with mounting flanges.

Weight. 1.68 lbs (0.76kg)

Depends upon line quality.

DLM4500 DIMENSIONS



ABOUT DATA-LINC GROUP

For over fifteen years, Data-Linc Group has provided reliable communication solutions for industrial automation systems. Data-Linc Group, an alliance partner with most major PLC manufacturers including Rockwell Automation, Siemens, Schneider Electric, GE Fanuc and Omron, as well as others, provides expert technical support and communications consultation. Data-Linc's industry proven RF technology has been successfully implemented in all major industries including automotive plants, consumer goods manufacturing/packaging, steel mills, mines, oil/gas refineries, paper mills, utilities and transportation systems. Its products are available worldwide. Data-Linc recently expanded its market with a line of wireless modems for the European Union.

ALLIANCE PARTNERS



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