

# LLM1100

# BELL 202 / CCITT V.23 1200 BAUD MODEM



Data-Linc Group's LLM1100 is a Bell 202 (CCITT V.23 optional) 1200 baud modem. It can be easily configured for simplex (bit mode), half-duplex and full-duplex operation. The LLM1100 is designed to be used on private, leased nonswitched telephone lines or any dedicated two-conductor wire (twisted or untwisted, shielded or unshielded).

The LLM1100 is microprocessorbased—when the carrier shuts off, data bit errors are eliminated. This reduces retransmissions for trouble-free PLC communications. The LLM1100 also incorporates a unique data sense carrier control feature that eliminates the need for RTS/CTS control on multipoint Remotes.

The LLM1100 easily interfaces with most PLCs, RTUs, PCs. The LLM1100 supports RS232 interface.

The LLM1100 has a range of 20 miles (32 km) on any ordinary wire pair or unlimited on loaded telephone company voice grade (VG-6) leased lines or equivalent.\*

## **F**EATURES

- Long-range data communication via frequency shift key (FSK) simplex, half- and full-duplex modem
- Ideal for nonswitched private wire (spare pair) or leased telephone lines or any dedicated wire pair\*
- Two or four wire operation
- Seamless interface with most PLCs,
  RTUs and PCs
- Easily field configured or factory pre-configured for your application
- Transmits up to 20 miles (32 km) on unloaded lines or unlimited range on loaded lines\*
- Point to point or multidrop
- Data sense carrier control feature

\*dependent upon wire size and line quality

# **A**PPLICATIONS

- Extended communications over private or leased telephone lines
- Compatibility with Bell 202 or CCITT V.23 modems

Please contact us to discuss your specific industrial data communication needs.

# LLM1100 Specifications

#### Range

Up to 20 miles (32 km) on unloaded lines or unlimited range on loaded lines<sup>1</sup>

#### Serial Data Interface

Protocol. RS232, 10 or 11-bit asynchronous

**Throughput**. 300, 600, 1200 Baud **Flow Control**. RTS control or DSCC (Data Sense Carrier Control)

Serial Connector. DB9 female

#### **Carrier Interface**

**Protocol.** Bell 202, CCITT V.23 (Bell 202 default). **Carrier Connector**. Removable Terminal Block.

## Operation Modes:<sup>2</sup>

Point-to-Point, Point-to-Multipoint.

Two wire / Four wire.

Simplex, Half-Duplex and Full-Duplex (Full-Duplex requires four wires and Point-to-Point mode)

#### Power

**Supply Voltage.** 11 - 24 VDC; 12 VDC wall mount transformer supplied with modem

Current: 60 mA @ 12 VDC

Power Connector. Center Positive Barrel Jack or

Removable Terminal Block

#### **Operating Environment**

**Standard Temperature**.  $32^{\circ}$  to  $140^{\circ}$  F ( $0^{\circ}$  to  $60^{\circ}$  C)

Humidity. 0 to 95% non-condensing

#### **Enclosure**

NEMA 1; 18-guage steel; 1.54 x 4.90 x 7.75 inches (3.9 x 12.4 x 19.7 cm) including mounting flanges

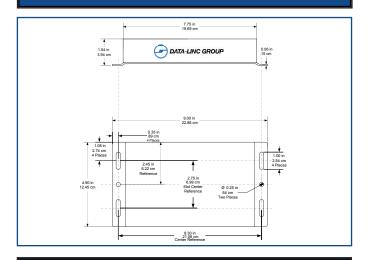
### Weight

2 lbs (0.91 kg)

- 1 Loaded lines require Telco VG-6 spec lines or equivalent. Line condition, size and noise will effect overall performance. Shielded wires should not be used. Line loss between any two devices in the network cannot be more than 16dB.
- 2 To help with the proper application of the modems, please provide your Data-Linc Group sales representative with a detailed diagram of the proposed application.

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# **LLM1100 DIMENSIONS**



## ABOUT DATA-LINC GROUP

Since 1988, 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 as well as the instrumentation industry. With its line of wireless modems for the European Union, Data-Linc's products and support are available worldwide. All Data-Linc products provide field proven performance and come with industrial grade support. For more information, please contact us.

# ALLIANCE PARTNERS





#### **Corporate Headquarters**

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