DATARADIO®

DL-3282
1200 BAUD MODEM

The DL-3282 external modem is designed for SCADA markets that utilize slow speed data transfer modes. The DL-3282 is FCC refarming compliant when paired with the RNet™ brand JSLM or COR™ brand DL-3400 telemetry radios.

This transparent modem is designed to eliminate dribble bits, making it capable of sending Modbus Protocol messages.

User programmable to operate at 1200 and 300 bps.

Selectable operating modes: Bell 202 and 103.

RS-232 compatible with standard RTS/CTS hardware handshaking capable of half or full duplex operation.

Small size permits easy installation in a wide variety of applications.

Internal LED aids troubleshooting. Flashing green indicates power and that the unit is operational. Solid red indicates transmit.

Standardized interface makes it configurable with all Dataradio COR radio products.

Rugged design with two-year warranty and manufactured in the USA.

DL-3282 TECHNICAL SPECIFICATIONS*

GENERAL

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FCC ID	Part 15
Dimensions (L x W x H)	4.75" x 2.90" x 1.237" (12.07cm x 7.37cm x 3.14cm)
Operating Voltage	7 to 16 VDC
Current Drain	Less than 50 mA
Temperature Range	-30°C to +60°C
Data Interface	EIA RS-232C standard DB-23 subminiature connector, female
COR ™ Brand Radio Interface	10-pin 3M type 3325 connector
RNet ™ JSLM Interface	DE-15 pin connector
RTS/CTS	30 / 60 / 180 / 240 msec
Data Rates	FSK: 1200, 300 bps
Data Format	Transparent to asynchronous data
Bit Error Performance**	Less than 1x10-6 at 18 dB SINAD with 3.3 kHz deviation and 25 kHz RF channel bandwidth
Transmit Keyline	Driver logic low open-collector NPN transistor with emitter grounded I_C (max) = 200 mA; V_{cc-on} (max) = 0.3 V

** Maximum system performance occurs when modem Tx data level is adjusted to produce 2/3 of the allowable deviations.

DL-3282 TECHNICAL SPECIFICATIONS*

MODES OF OPERATION (switch selectable)

Modem	Baud Rate (bps)	Duplex	Transmit Frequency		Receive Frequency		Answer Tone Freq. (Hz)
			Space (Hz)	Mark (Hz)	Space (Hz)	Mark (Hz)	
Bell 103 Orig	300	Full	1070	1270	2025	2225	—
Bell 103 Ans	300	Full	2025	2225	1070	1270	2225
Bell 202	1200	Half	2200	1200	2200	1200	2025
Bell 202	1200	Full	2200	1200	2200	1200	2025
Bell 202 Equalized	1200	Half	2200	1200	2200	1200	2025

MECHANICAL LAYOUT

FRONT VIEW

BACK VIEW

SIDE VIEW
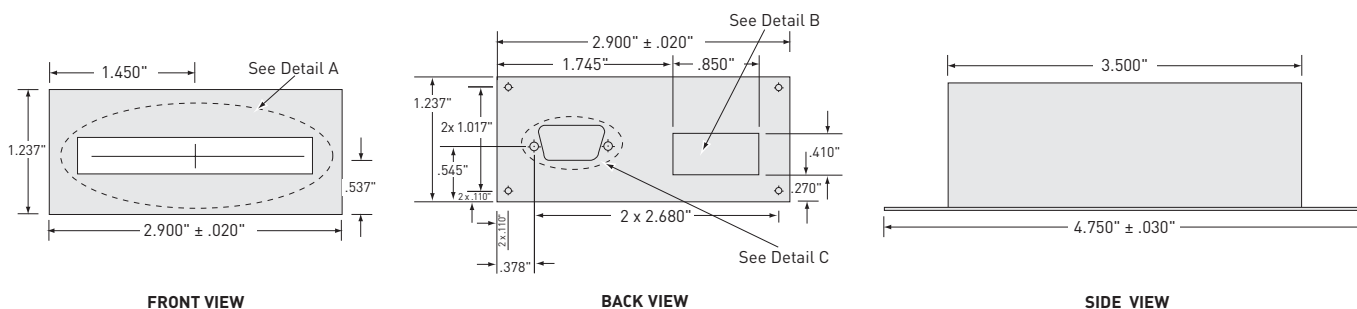
DETAIL A
The data interface connector is an RS-232C standard DB-25.

DETAIL B
COR™ brand telemetry radio interface connector is a 10-pin 3M (Type 3325).

Pin	Description	Pin	Description
1	Wideband Out	6	Keyline (active low)
2	Wideband In	7	Carrier Detect
3	NC (reserved for future)	8	FSK Out
4	NC	9	Ground
5	B+	10	FSK In

DETAIL C
DE-15 connector for JSLM interface.

Pin	Description	Pin	Description
1	Squelch In	9	13 volts
2	PTT Out	10	Subaudible Data
3	Ground	11	Tx / _Rx In
4	Tx Wideband Data[1]	12	ARQ Out
5	Tx Data[2]	13	Ground
6	Intercept / Busy In	14	Rx Wideband Data[1]
7	Tx Mute Out	15	Rx Data[2]
8	13 volts		

[1] Filtered [2] Unfiltered

* Specifications listed are typical for most applications using good RF propagation and installation practices. Refer to DL-3282 manual for minimum specifications.
** Maximum system performance occurs when modem Tx data level is adjusted to produce 2/3 of the allowable deviations.