

MERCURY MESSENGER MODEM

Provide Remote Communications with This Flexible, Energy-Efficient Modem

Designed for harsh gas industry environments – backed by Mercury quality, service and 4-year warranty!



▲ Mercury Instruments
Messenger Modem

Mercury Instruments Messenger Modem addresses the natural gas industry's need for flexible and reliable remote communications. The modem's low-power circuitry and unique features offer solutions for a wide range of field applications.

The Messenger Modem typically installs inside the case of Mercury's standard electronic correctors or pressure recorders. You can also mount it separately in its own enclosure – with or without I.S. barriers. Use this modem in situations that require a durable, low-power, Hayes-compatible modem.

Remote-friendly features

Mercury Instruments targets the following features to help customers enhance remote site communications:

- Small size – just 4" x 2.5" (10 cm x 6.35 cm)
- Harsh temperature range from – 40 F to 150 F (-40 C to 65.5 C)
- Modulation range up to 2400 baud
- Low-power circuitry for battery sharing capability with any Mercury electronic instrument
- CMOS or RS-232 instrument interface
- Compatible with analog cellular transceivers
- Standby power mode conserves power – unit activates with RS-232 signal or ring voltage
- LED indicators show modem status and power condition for field diagnostics
- 3-wire and 5-wire compatibility for optimum operating flexibility
- Retrofit kits for easy installation in Mercury ECAT, Mini, ER, Mini-Max or Mini-AT instruments

Mercury Instruments can install the Messenger Modem at the factory into any Mercury product. An assortment of accessories is available for the modem including a battery pack, intrinsic safety barriers, and an array of rugged enclosures.



Mercury Instruments, Inc.

Reliable Communications from Any Remote Site

Communication

Modulation standards

- CCITT V.22 bis 2400 bps
- CCITT V.22 1200 bps
- Bell 212A 1200 bps
- CCITT V.22 bis 300 bps

Telephone connection

- 4-conductor RJ-11C

Local serial communication

- Type RS-232 & CMOS (V24 serial TTL)
- Baud rate 300, 1200, 2400 bps
- Data bits 8 (fixed)
- Stop bits 1 (fixed)
- Parity none (fixed)

Power supplies

Operating voltage: 3.0 to 16.0 VDC

- Alkaline disposable pack
- Alkaline receptacle pack
- DC power supply (continuous 9 VDC output from 120 to 240 VAC transformer)

Dimensions

- 4" x 2.5" (10 cm x 6.35 cm)

Environmental conditions

- Ambient temperature -40 F to 150 F (-40 C to 65.5 C)
- Ambient humidity 0% to 95% noncondensing

Certifications

- FCC Part 15 & 68
- Designed for UL Class 1, Div-2

Dip switch options

- Switch #1 – baud rate (1200 or 2400)
- Switch #2 – line share (enable or disable)
- Switch #3 – sleep mode (enable or disable)
- Switch #4 – line surrender (enable or disable)
- Switch #5 – wakeup on serial data (enable or disable)
- Switch #6 – shutdown on low battery (disable or enable)
- Switch #7 – not used
- Switch #8 – serial data mode (RS-232 or CMOS)

Field connections

- +DC Power to the circuit board
- COM Circuit board common (power)
- TXD Transmit data line
- RXD Recieve data line
- CTS Clear-to-send
- RTS Ready-to-send
- COM Circuit board common (communications)

LED indicators

- RING Ring
- RXD Recieve Data
- PWR Power
- OH Off Hook
- DCD Carrier Dected
- TXD Transmit Data

To order

Please specify

- Type of retrofit kit – internal ECAT, internal ER, internal Mini, internal Mini-Max, internal Mini-AT, or stand-alone
- If stand-alone, describe type of enclosure
- Preferred power option – alkaline disposable pack, alkaline receptacle pack, or DC power
- Type and number of intrinsic safety barriers, if required



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Precision instruments for the natural gas industry