

## 907-SER

### 8-Channel Serial Data Expansion Card

#### Description

The 907-SER card is an 8-Channel RS-232/485 serial data expansion card intended for stacking on top of a 907 motherboard to add channel capacity. By default, this card is switch configured to multiplex eight data channels onto a single backplane data port (8:1) connected to a 907 motherboard. This default configuration has a maximum baud rate of 250 kbaud on each of the eight serial channels. Options include support for RS-422 configurations and higher data rates.

Power is typically drawn from the 907 motherboard via the PC/104 connector.

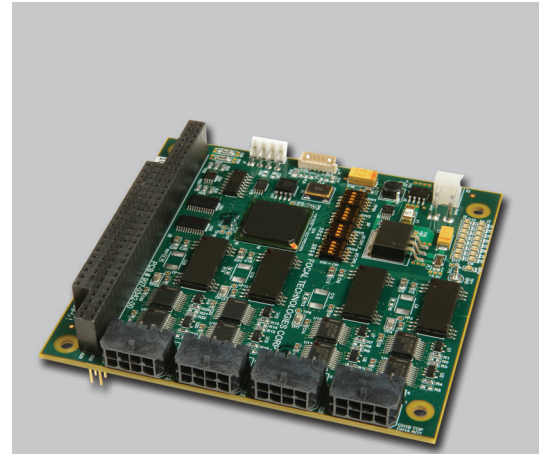
A 907-DIAG-E diagnostic card may be added to the same stack as the console 907 motherboard to obtain system diagnostics of both the remote and console stacks through an Ethernet interface and Graphical User Interface (GUI) software.

#### Features

- Electrically isolated serial data channels (in pairs)
- Switch selectable RS-232/485 interfaces for individual channels
- RS-422 and RS-485 inputs have fail-safe biasing
- Compatible with 907-DIAG-E diagnostic card and Graphical User Interface (GUI) software
- On-board diagnostic LEDs
- Compatible with 907-232 and 907-485 serial cards

#### Benefits

- Isolated data channels provide more robust interface to external equipment
- Simplifies troubleshooting with advanced diagnostics
- Reduces sparing requirements



#### Typical Applications

- Remotely Operated Vehicles (ROVs)
- Pipe Inspection Robots
- Bomb Disposal Robots
- Tether Management Systems
- Tactical Networks

# Model 907 Datasheet

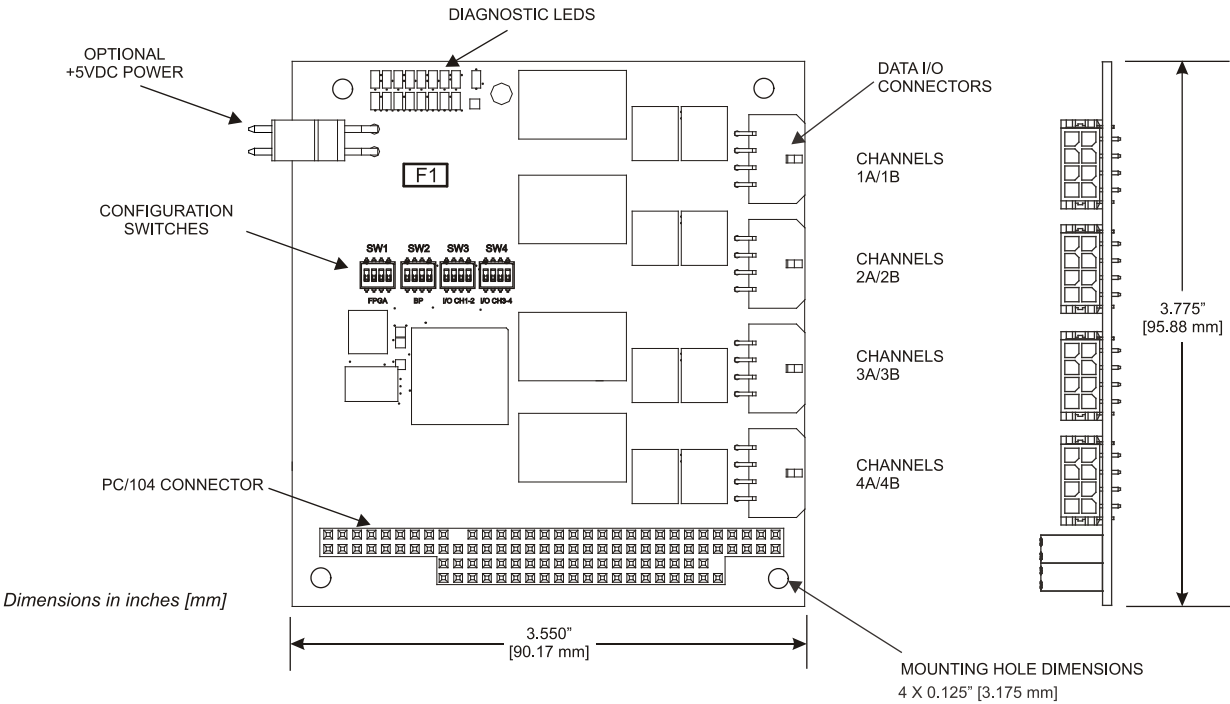
Model 907

| Data         |                                                                                                                                                                                                |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| No. Channels | 8 channels of RS-232 (default), RS-485 or RS-422*                                                                                                                                              |
| Data Rate    | RS-232: 120 kbaud<br>RS-485/422: 250 kbaud (2.5 Mbaud option)                                                                                                                                  |
| Options      | Factory configure RS-422<br>2.5 Mbaud on four channels (4 backplane lines)<br>400 kbaud on eight channels (2 backplane lines)<br>Standalone serial copper mux<br>Installed 120 Ohm terminators |
| Mechanical   |                                                                                                                                                                                                |
| Dimensions   | PC/104 (form-factor only)                                                                                                                                                                      |
| Weight       | < 120 g (0.26 lb)                                                                                                                                                                              |

\*Factory configured option

| Electrical    |                                                                                |
|---------------|--------------------------------------------------------------------------------|
| Power Voltage | +5.0 VDC $\pm 10\%$ , regulated                                                |
| Power Current | 0.75 A typical (1.5 A max)                                                     |
| Connectors    |                                                                                |
| Data I/O      | 4 x 8-pin Molex (Micro-Fit Series)                                             |
| Power         | Via PC/104 connector<br>Optional: 2-pin Molex (KK Series)                      |
| Environmental |                                                                                |
| Temperature   | -10°C to +60°C (operational)<br>-40°C to +85°C (storage)                       |
| Humidity      | 85% RH, non-condensing                                                         |
| Vibration     | 5 g, 25 – 1000 Hz, 3-axis                                                      |
| Shock         | 30 g, 11 ms, half-sine, 3 axes                                                 |
| Options       | 6000 psi pressure tolerant, extended temperature, stress screened or qualified |

## 907-SER Dimensions



Dimensions in inches [millimeters]

**Note:** These are standard commercial products that are available with many options or configurations not explicitly shown.