## 8-Channel Serial Data Expansion Card Model 907-SER

Focal Technologies Corporation, a Moog Inc. company, has over 30 years of expertise in supplying standard and custom marine products for harsh environments and is a leading manufacturer of high performance and high quality multiplexers. Contact Focal for any assistance in selecting the best solution for your requirements.



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

### Applications

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



# **Specifications**

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

Electrical		
Power Voltage	+5.0 VDC ±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 Optional: 2-pin Molex (KK series)	
Environmental		
Temperature	-10°C to +60°C (operational) -40°C to +85°C (storage)	
Humidity	85% RH, non-condensing	
Vibration	5 g, 25 - 1000 Hz, 3 axes	
Shock	30 g, 11 ms, half-sine, 3 axes	
Options	6000 psi pressure tolerant, extended temperature, stress screened or qualified	

\*Factory Configured Option

All specifications and information are subject to change without notice. Please contact Focal for the latest updates.

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