## 914-X Series Expansion Cards

Model 914-EX, 914-VDX, 914-AX, 914-DX

Focal Technologies Corporation, a Moog Inc. company, has over 30 years of expertise in supplying standard and custom products for harsh environment applications 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 Moog Focal 914-X Series multiplexer system provides optical data rates up to 6 Gbaud. Taking advantage of this abundant bandwidth, a series of expansion cards is available to complement the 914-HDE motherboard. These expansion options are packaged into the same credit card size form factor and stack neatly on top of the 914-HDE. Up to 8 expansion cards with various options may be stacked onto a single 914-HDE motherboard to create a feature rich yet compact modular multiplexing solution.

### Features

- 914-HDE motherboards have:
  - 4 Low speed expansion channels
  - 4 Medium speed expansion channels
- Expansion Cards Feature:
  - Multiple Gigabit Ethernet
  - Multiple NTSC/PAL video
  - Multiple isolated serial (RS-232 / 485 / 422)
  - CAN bus, hydrophone, TTL, sonar
- Sub millisecond latency (no buffer delays)
- Rugged design for harsh environment, including 6000 psi pressure tolerant version
- Full system diagnostics via 914-HDE and provided software GUI
- Full user software control of serial data protocol settings
- Diagnostic LEDs on all cards
- Diagnostic LED header for enclosure integration

#### Benefits

- Fast response for time-critical links
- Upgrade to 914-X Series multiplexer systems
- No additional optical components or wavelengths
- Transparent links with no buffering
- Ultra compact size for tight spaces and small enclosures

## Applications

- Remotely Operated Vehicles (ROVs) and Tether Management Systems (TMS)
- Pipe inspection robots
- Bomb disposal robots
- Video security systems
- Tactical networks and defense systems
- Industrial process control

# **Specifications**









914-EX Ethernet Expansion Card	
Supported Data Formats	2 x 10/100/1000BASE-T(X) Ethernet
Expansion Channels Required	<ul><li>1 x Medium Speed Expansion Channel</li><li>2 x Medium Speed Expansion Channels (optional)</li></ul>
Features	Switchless Ethernet Multiplexer, low latency, high bandwidth LED diagnostics, LED header Full software diagnostics and configuration via 914-HDE
914-VDX Video and Serial Data Expansion Card	
Supported Data Formats	2 x NTSC / PAL Video 4 x Non-Isolated Serial Data (RS-232 / RS-485 / RS-422)
Expansion Channels Required	1 x Medium Speed Expansion Channel
Features	Video and Data Multiplexer, low latency LED diagnostics, LED header Full software diagnostics and configuration via 914-HDE
914-AX AIB Plug-in Module Expansion Card	
Supported Data Formats	CAN Bus, Hydrophone, Analog Sonar, Tritech <sup>®</sup> ARCNET, TTL, RS-232, RS-485, RS-422 1 x Channel/signal per module
Expansion Channels Required	1 x Low Speed Expansion Channel
Features	Moog Focal AIB plug-in module adaptor Hosts a single AIB plug-in module, single signal per module LED diagnostics, LED header
914-DX Serial Data Expansion Card	
Supported Data Formats	6 x Isolated (in pairs) Serial Data (RS-232 / RS-485 / RS-422 / TTL)
Expansion Channels Required	1 x Low Speed Expansion Channel
Features	Serial Data Multiplexer Serial Channels are isolated in pairs (3 isolation circuits) Each channel can be individually configured for protocol, terminations and timeouts LED diagnostics, LED header Full software diagnostics and configuration via 914-HDE

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

All trademarks are property of their respective owners.

© 2019 Moog Inc. DS914Expansion-v2.0

www.moog.com/focal