

## 907Plus

### Fiber optic media converter

#### Description

The new 907Plus is a singlemode multiplexer that extends the capabilities of standard 907 motherboards with an added video channel, galvanically isolated data channels, and a comprehensive, integrated diagnostics network. System expansion is even easier with a rapidly growing family of compatible daughtercards and media converters. A diagnostics add-on card is now available that offers end-to-end performance monitoring and identification for multi-card systems via an Ethernet connection at the console and Graphical User Interface (GUI) software.

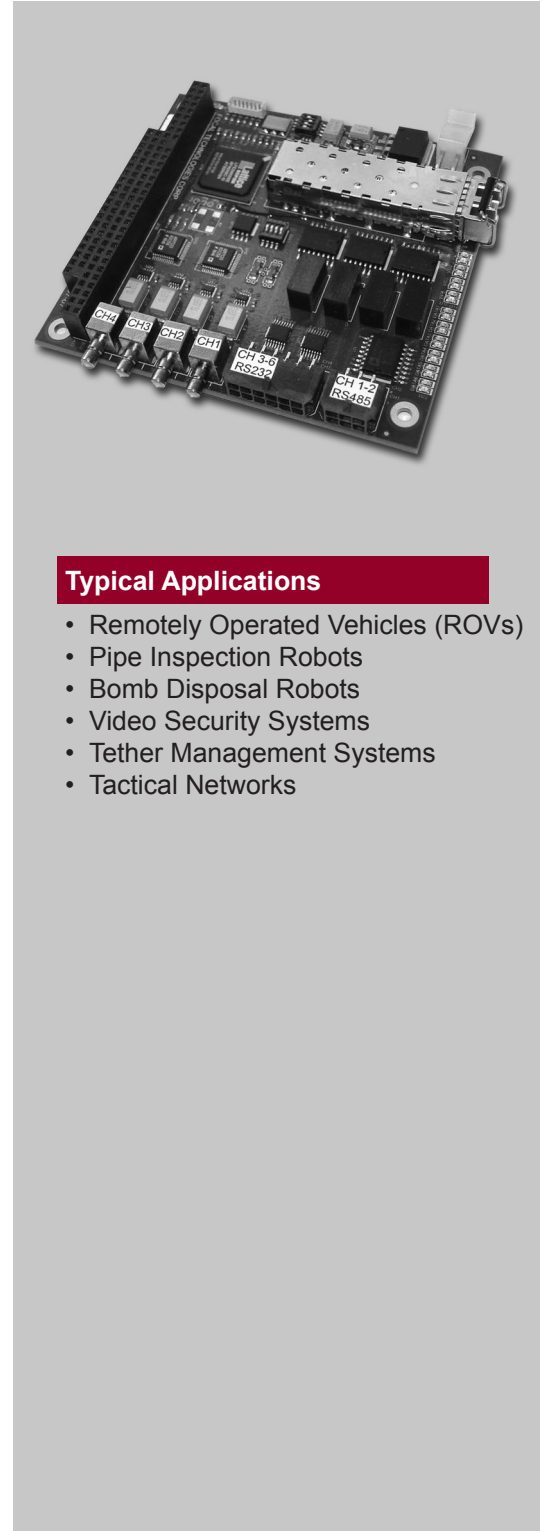
Expansion cards may be stacked on the motherboard to add up to 48 data channels in a variety of formats, including RS-232, RS-485 / 422, TTL, Ethernet, CANBus, analog sonar, hydrophone, audio, and Tritech ARCNET. Depending on transceiver options, optical power budgets are typically 20-26 dB with 10 km or more of singlemode fiber.

#### Features

- Available as a pressure tolerant model, rated for 3000 or 6000 PSI
- Ethernet diagnostics daughtercard available with standard Graphical User Interface (GUI) or Microsoft .NET library for customer GUI development
- Replaceable SFP transceiver with built-in diagnostics
- Higher data bandwidth available versus standard 907
- I2C bus supports diagnostic communications with expansion cards and media converters
- Galvanically isolated serial data channels

#### Benefits

- Isolated data channels provide more robust interface to external equipment
- Supports a wide range of optical options including CWDM for combining up to 4 separate 907 systems on a single fiber or several 907s with media converters
- No motherboard data channels are disabled when expansion cards are added
- Diagnostics monitoring allows early identification of potential problems



#### Typical Applications

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

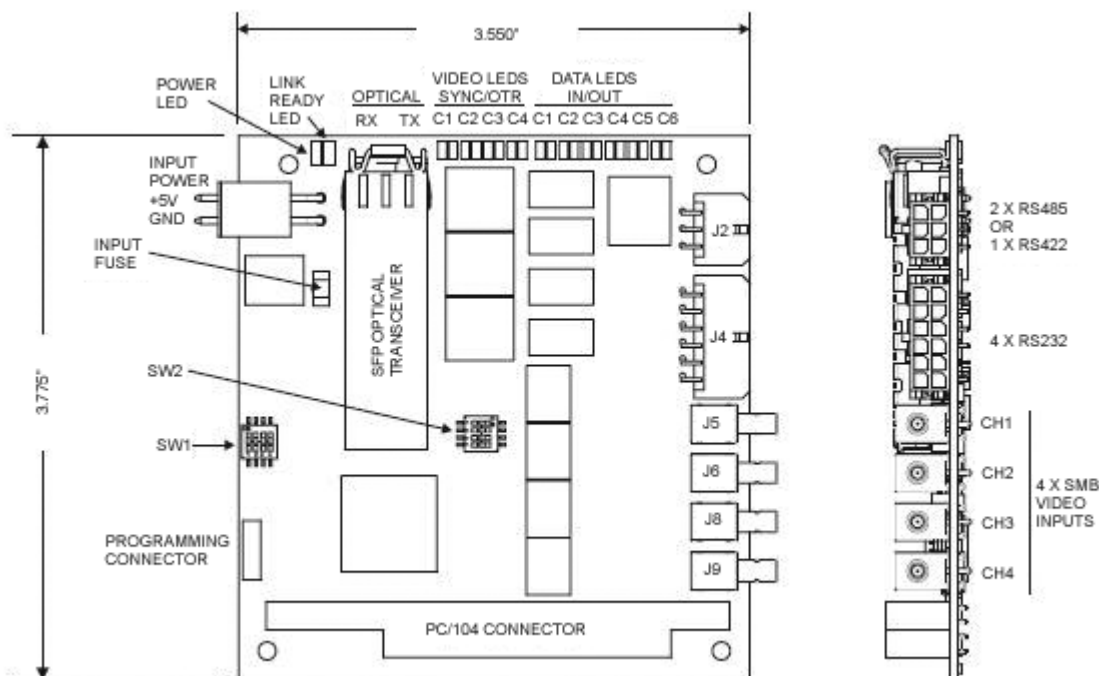


# Fiber Optic Multiplexers

Video	
<b>No. Channels</b>	4
<b>Format</b>	NTSC, PAL, Y / C, RGB, YPrPb
<b>Digitization</b>	10 bit
<b>Bandwidth</b>	6.0 MHz
<b>SNR</b>	56 dB minimum
<b>Impedance</b>	75 Ohms
Data	
<b>RS-232</b>	4 Isolated bidirectional channels - 120 kbaud
<b>RS-422 / 485</b>	2 Isolated RS-485, or, 1 isolated RS-422 channels - 2.5 Mbaud
<b>Options</b>	Expansion cards, for Ethernet, serial data, Tritech ARCNET, MS-900, Hydrophone / Analog, CANBUS, IRIG-B, HD-SDI, ECL, IEEE-1394
Optical	
<b>Optical Fiber</b>	1 - 2 singlemode
<b>Data Rate</b>	1.2 Gbaud uplink and downlink
<b>Wavelengths</b>	1310 nm uplink, 1550 nm downlink (standard)
<b>Flux Budget</b>	20 dB standard (others available)
<b>Options</b>	CWDM wavelengths for combining multiple model 907 and / or 903 systems on one singlemode fiber. Bidirectional transceivers (lower cost).

Electrical	
<b>Power Supply</b>	+5 VDC regulated input required
<b>Power Used</b>	3.5 W typical, each end
<b>Grounding</b>	Shared common for power and video, data is isolated
Mechanical	
<b>Dimensions</b>	PC-104 form factor (adapter card available for integration with PC-104 bus)
<b>Weight</b>	120 g (0.25 lb)
<b>Enclosures</b>	Standard and custom versions available
<b>Options</b>	Eurocard adapter for installation in a standard 3U Eurocard rack with front panel access to video / data connectors
Connectors	
<b>Optical</b>	Dual LC (SFP)
<b>Video</b>	SMB
<b>Data</b>	1 x 12-pin Molex for RS-232 1 x 6-pin Molex for RS-485 / 422
<b>Power</b>	1 x 2-pin Molex
Environmental	
<b>Temperature</b>	-10 to +60 C (operational) -20 to +85 C (storage)
<b>Humidity</b>	85% relative, non-condensing
<b>Vibration</b>	MIL-STD-167-1 (ships), 3-axis
<b>Shock</b>	MIL-STD-810E
<b>Pressure (Optional)</b>	Qualified for 3000 and 6000 PSI

## 907Plus Dimensions



Dimensions in inches.

Manufactured in an ISO 9000-2000 registered facility.

Specifications and information are subject to change without prior notice.  
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