

907-HDV (HD-SDI)

High Definition Video Media Converter

Description

The 907-HDV (HD-SDI) media converter provides transmission of a single digital High Definition Video channel over a singlemode or multimode fiber. In addition to converting HD-SDI (SMPTE 292M) to fiber, this card also provides a solution for SD-SDI (SMPTE-259M) to fiber conversion.

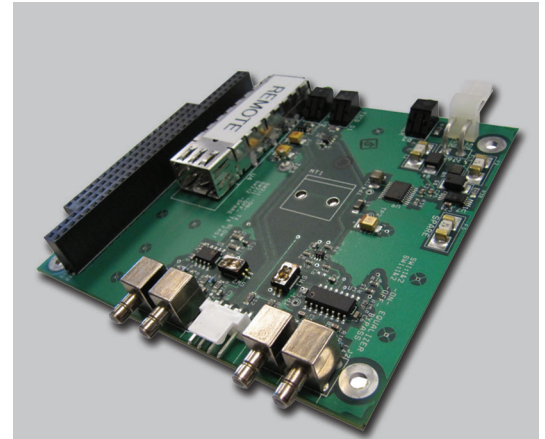
The 907 HDV media converter may be used as a standalone card or optically integrated into a Model 907 system stack via CWDM modules.

Features

- Supports SMPTE-292M (HD-SDI) and SMPTE-259M (SD-SDI) standards
- On-board diagnostic LEDs for power, optical link and video sync
- External diagnostic LED connector
- Compatible with 907-DIAG-E diagnostic card and Graphical User Interface (GUI) software
- Interchangeable SFP transceiver
- Rugged design for harsh environments, including pressure tolerant version

Benefits

- Provides real-time, low latency uncompressed video transmission
- Extends video transmission up to 10 km
- Simplifies troubleshooting with advanced diagnostics
- Supports a wide range of optical options, including CWDM wavelengths and multimode configurations



Typical Applications

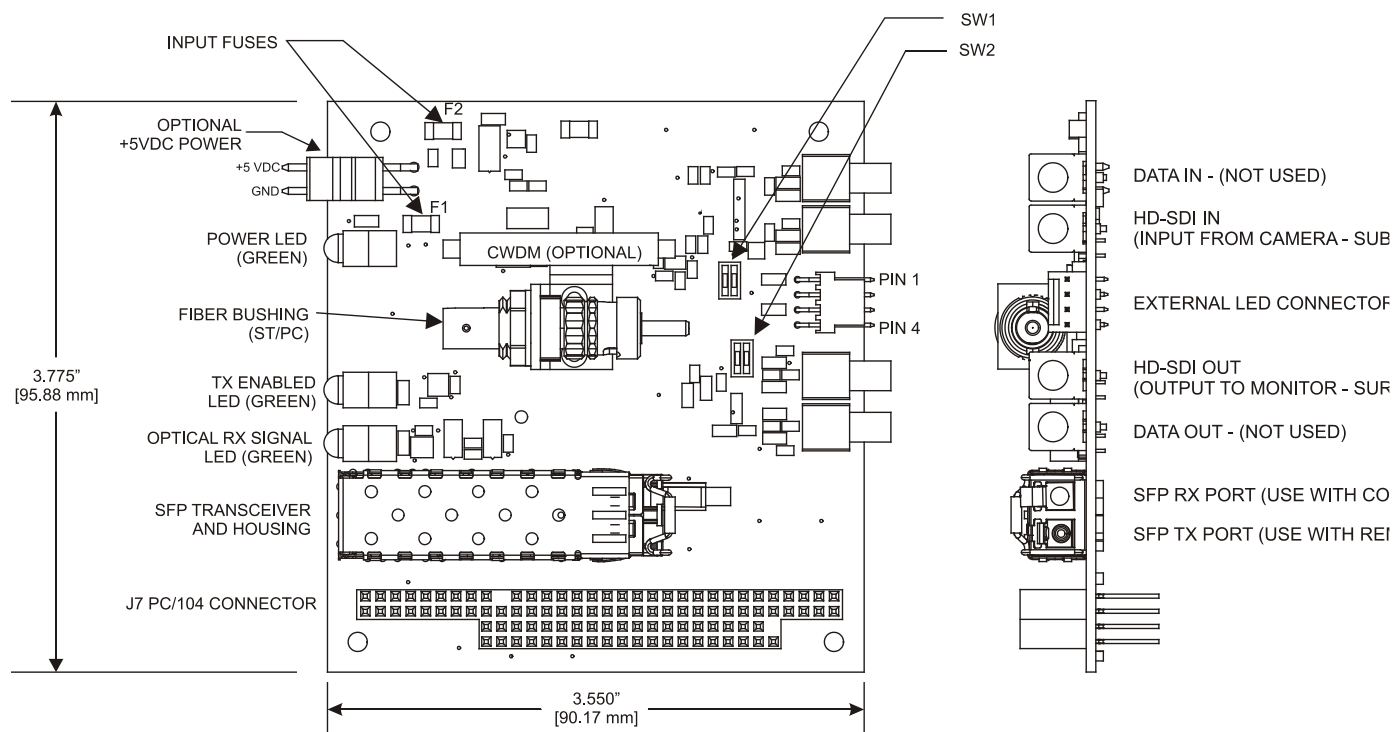
- Remotely Operated Vehicles (ROVs)
- Pipe Inspection Robots
- Bomb Disposal Robots
- Video Security Systems
- Tether Management Systems
- Tactical Networks and Defense Systems
- Industrial Process Control
- Remote HD video cameras

Model 907 Datasheet

Video	
No. Channels	1
Format	HD-SDI (SMPTE-292M) @ 720p, 1080i and 1080p SD-SDI (SMPTE-259M) @ 480p
Data Rate	HD-SDI: 1.483/1.485 Gbps SD-SDI: 143/177/270/360 Mbps
Impedance	75 Ohms
Latency	<1 μ s (not including fiber, ~5 μ s/km)
Optical	
Optical Fiber	1 singlemode (9/125 μ m)
Baud Rate	143 - 1485 Mbaud
Wavelength	1310 nm standard (CWDM Optional, 1471-1611 nm)
Flux Budget	> 20 dB (24 dB typical)
Options	Bidi (bidirectional) transceivers; higher/lower budget transceivers, multimode
Electrical	
Power Voltage	+5.0 VDC $\pm$ 10%, regulated
Power Current	0.5 A typical (0.7 A max.)
Power Used	2.5 W typical (3.5 W max.)

Mechanical	
Dimensions	PC/104 (form-factor only)
Weight	< 120 g (0.26 lb) including SFP
Options	Custom enclosures, PC/104 connector with stacking or non stacking pins
Connectors	
Video	SMB
LED Status	1 x 4-pin Molex
Optical	LC (SFP)
Power	2 pin Molex, 0.156 inch pin spacing
Options	Optical: ST/PC
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

907-HDV Dimensions



Dimensions in inches [millimeters]

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