

IP68 Rated DVI/HDMI to 3-G SDI Scaling Video Converter

Overview

The AVI C000301-XX DVI/HDMI to 3-G SDI Scaling Video Converter is a fully rugged stand-alone unit that can convert DVI-D or HDMI video inputs to three channels of SD SDI, HD SDI, or 3-G SDI video outputs.

Just like AVI's C00030X-00 series converters, the DVI/HDMI video input is can accept SMPTE and VESA format standards and scales it to SMPTE 259M, 292M, or 425M. Low latency, high performance processing provides SDI encoding to triple multiplexed SDI outputs. Re-clocked outputs provide robust, maximum distance transmission of SDI video. With a high-speed circular connector for DVI/HDMI input, and pressure venting, the C000301-XX series is IP68 rated.

Stand-alone or in combination with various AVI system components, AVI's rugged DVI/HDMI to 3-G SDI Video Converters offer a high-performance solution for converting DVI or HDMI video to SDI. Now all sensors and mission video sources can be used, maximizing the capability of the mission system.



Standard Features

- One DVI-D or HDMI inputs
- Three 3G/HD/SD SDI outputs
- Selectable or Auto SDI output resolution and frame rate
- Tri-color LED indicator for Output Resolution setting
- Inputs auto detected
- SMPTE 259M, 292M, 296M, 425M, ITU-R BT.656 and ITU-R BT.601 compliant
- 9 36 V DC Power



- MIL-STD 38999 circular power and signal connectors
- -45C° to 70C° operation
- Heat dissipating enclosure
- Three-year warranty
- Front panel USB for setup and programing

Benefits

- Converts video to SDI format for +100m transmission and distribution
- Less susceptible to noise and signal loss compared to DVI-D and HDMI format transmission
- Allows single, unified cabling infrastructure on sensor platforms
- Can be used as a "portable device" port for distribution and display of tablets and laptops
- Triple output for each channel providing redundancy or multiple display output
- Reduction in wiring weight and complexity low weight coaxial cable can be used
- Open works with any DVI/HDMI source capable of SDI formats and certain VESA formats

Typical Applications

- Surveillance systems
- Airborne Law Enforcement sensor systems
- Customs and Boarder Protection sensor systems
- Naval and Coastguard ship's sensor systems
- Ground Vehicle sensor systems



IP68 Rated DVI/HDMI to 3-G SDI Scaling Video Converter - Specifications

Video Inputs Video Outputs	 DVI-D/HDMI (1) 22 pin high-speed circular connector RGB 4:4:4, YUV 4:2:2, YUV 4:4:4 Color Encoding 3G/HD/SD (3) Re-clocked 10 bit, YUV 4:2:2 color encoding Connector type – BNC 75 Ω 	Model Numbers	• C000301-01 single channel • C000301-02 single channel	with audio	
Video Input Video output Formats	 DVI/HDMI ○ 1080p 60/59.94/50/30/29.97/25/24/23.98Hz ○ 1080i 60/59.94/50Hz ○ 1280x1024 60, 59.94Hz (VESA) ○ 720p 60/59.94/50/30/29.97/25/24/23.98 Hz ○ 1024x768 60/59.94/50Hz (VESA) ○ 800x600 60, 59.94Hz (VESA) ○ 576p 50Hz ○ 576i 50Hz ○ 480p 60/59.94Hz ○ 480i 60/59.94Hz ○ SDI SMPTE 259/292M/424M ○ 1080p 60/50/30/25/24/23.98Hz ○ 1080i 60/50Hz ○ 720p 60/50/30/25/24Hz ○ 625i 50Hz ○ 525i 60Hz 	Environmental DO-160 Tested *By Similarity	 Operating Temp Low Operating Temp High Short Term Op Temp Low Short Term Op Temp High Ground Survival Low Temp Ground Survival High Temp Temp Variation Humidity Operational Shock Vibration Explosion Proofness* Waterproofness Magnetic Effect Power Input* Voltage Spike EMI/EMC ESD* Ingress Rating Altitude Operating 	-55°C +85C° 5C° per minute	DO-160G Cat B2 DO-160G Cat B2 DO-160G Cat B4 DO-160G Cat B4 DO-160G Cat B4 DO-160G Cat B4 DO-160G Cat B DO-160G Cat B DO-160G Cat A DO-160G Cat U, U2 Method 511.6 DO-160G Cat Y DO-160G Cat A DO-160G Cat B DO-160G Cat B DO-160G Cat B DO-160G Cat A
Power	 +9 to +36 DC 0.21 A @ 28V DC, Single Channel Connector Type MIL-STD D38999/24FB98PN 	Dimensions and Weight	 182mm [7.17in] W, 36.9mr 0.754 kg [1.66 lbs], Single C 	n [1.45in] H, 118mm	

