Applied Video Imaging

AVI – Optimize your sensor

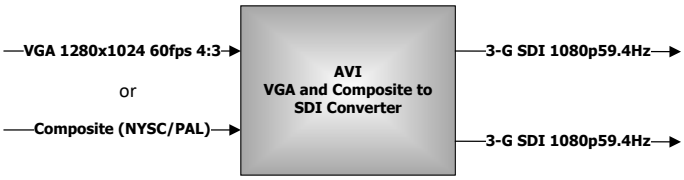
VGA to 3-G SDI Video Converter

Overview

The AVI VGA to SDI Video Converter is a rugged stand-alone unit that can convert VGA and Composite analog video inputs to scaled SD, HD, or 3-G SDI video outputs.

Low latency, high performance processing of VGA analog video or analog composite inputs provides selectable SDI output resolutions and frame rates. Aspect ratio processing is also user selectable.

Stand-alone or in combination with various AVI system components, AVI's rugged VGA to SDI Video Converter offers a high-performance solution for converting SDI to VGA and Composite. Now even older VGA based systems can be converted to SDI video, maximizing the capability of the mission system.



Standard Features

- Two SDI outputs
- VGA or NTSC/PAL (Composite) inputs
- SDI output can be scaled
- Inputs auto detected
- Advanced video scaling
- Aspect ratio conversion and selection
- SMPTE 425M, 259M, 292M, 296M, ITU-R BT.656 and ITU-R BT.601 compliant
- Easy setup by USB
- Setup software included
- 9 – 36 V DC Power
- MIL-STD 38999 circular power connector
- Three-year warranty

Benefits

- Converts VGA or Composite video to SDI format for devices that can only input SDI video formats
- Reduction in wiring weight and complexity – low weight coaxial cable can be used to the point of use
- Allows single, unified cabling infrastructure on sensor platforms
- Open - works with any VGA or Composite video source and any SDI video sink
- Continue using legacy video sources with upgraded sensor video

Typical Applications

- Surveillance systems
- Airborne Law Enforcement sensor systems
- Customs and Border Protection sensor systems
- Naval & Coastguard ship's sensor and mission systems
- Naval, Air Force and Coastguard rotary and fixed wing mission systems
- Ground Vehicle sensor mission systems

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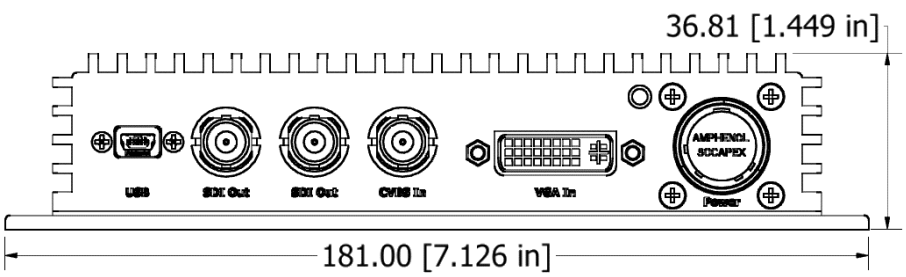
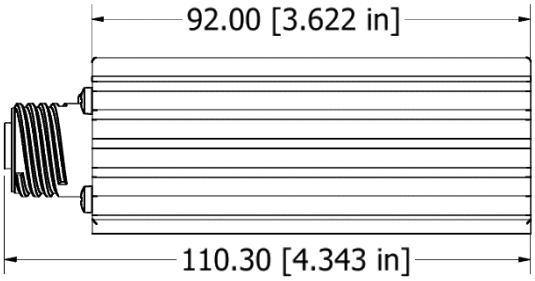
3-G SDI to VGA Video Converter - Specifications

Video Inputs	• VGA Analog ○ R,G,B, Hs, Vs ○ Connector type - DVI-I • NTSC/PAL (Composite) ○ Connector type – BNC 75 Ω	**Functionality**	• Output SDI resolution and frame rate • Output aspect ratio selection • Input video format auto detection • Dual SDI outputs
Video Outputs	• HD/SD/3-G SDI (2) ○ Re-clocked, 10 bit, 4:2:2 color encoding ○ Connector type – BNC 75 Ω		
Video Output Formats	• SDI SMPTE 259/292M/424M ○ 1080p 60/50/30/25/24Hz ○ 1080i 60/50Hz ○ 720p 60/50Hz ○ 625i 50Hz ○ 525i 60Hz	**Environmental**	• Operating Temp Low -45°C DO-160G Cat B2 • Operating Temp High +70°C DO-160G Cat B2 • Short Term Op Temp Low -45°C DO-160G Cat B4 • Short Term Op Temp High +70°C DO-160G Cat B4 • Ground Survival Low Temp -55°C DO-160G Cat B4 • Ground Survival High Temp +85C° DO-160G Cat B4 • Temp Variation 5C° per minute DO-160G Cat B • Humidity 38C° to 95@ 50C° DO-160G Cat A • Operational Shock 6g @ 11ms, 20G DO-160G Cat B • Vibration Random, 10-2000Hz DO-160G Cat U, U2 • Explosion Proofness* MIL-STD-810G Method 511.6 • Waterproofness Drip Test DO-160G Cat W • Magnetic Effect DO-160G Cat A • Power Input* DO-160G Cat A • Voltage Spike 2x Line Voltage DO-160G Cat B • EMI/EMC Sec 18, 19, 20, 21 DO-160G Cat B, CC, R, M • ESD* DO-160G Cat A • Ingress Rating IP67
Video Input Formats	• Analog Inputs (VGA) ○ 1080p@60/50/30/25/24Hz ○ 1080i@60/50Hz ○ 720p @60/50Hz ○ 1280x1024p@60Hz, 1280x960p@60Hz ○ 1024x768p@60Hz, 800x600p@60Hz ○ 720x576p@50Hz, 720x480p@60Hz ○ 640x480p@60Hz • Composite Inputs ○ NTSC/PAL	DO-160 testing to be completed *By Similarity	
Model Numbers	• C200301-00 1 channel Product Number		
Power	• +9 to +36 DC • 0.3 amps @28V DC, Single Channel • Connector Type MIL-STD D38999/20MB98PN	**Dimensions and Weight**	• 181 mm [7.13 in] W, 36.81 mm [1.45 in] H, 92 mm [3.62 in] D • 0.65 kg [1.43 lb]





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