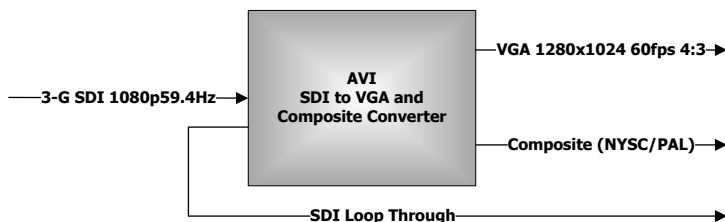**AVI – Optimize your sensor**

3-G SDI to VGA Video Converter

Overview

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

Low latency, high performance processing of SMPTE SDI video provides user selectable VGA and Composite output resolutions and frame rates. Aspect ratio processing is also user selectable. A re-clocked SDI loop through is also provided.

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

Standard Features

- SDI input with loop through
- VGA and NTSC/PAL (Composite) outputs
- VGA 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 SDI video to VGA and Composite format for devices that can only input these video standards
- 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 SDI video source and any VGA/NTSC video sink
- Continue using legacy video sinks 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

3-G SDI to VGA Video Converter - Specifications

Video Inputs	• HD/SD/3-G SDI (1) o Connector type – BNC 75 Ω	**Functionality**	• Output VGA resolution and frame rate • Output VGA and Composite aspect ratio selection • Input video format auto detection • Re-clocked SDI loop through output		
Video Outputs	• HD/SD/3-G SDI Loop Through (1) o Re-clocked, 10 bit, 4:2:2 color encoding o Connector type – BNC 75 Ω • VGA Analog o R,G,B, Hs, Vs o Connector type - DVI-I • NTSC/PAL (Composite) o Connector type – BNC 75 Ω				

Video Input Formats **Video Output Formats**	• SDI SMPTE 259/292M/424M o 1080p 60/50/30/25/24Hz o 1080i 60/50Hz o 720p 60/50Hz o 625i 50Hz o 525i 60Hz • Analog Outputs o 1080p@60/50/30/25/24Hz o 1080i@60/50Hz o 720p @60/50Hz o 1280x1024p@60Hz, 1280x960p@60Hz, 1024x768p@60Hz, 800x600p@60Hz, 720x576p@50Hz, 720x480p@60Hz, 640x480p@60Hz, 720x575i@50Hz, 720x480p@60Hz	**Environmental** DO-160 testing to be completed *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	-45°C +70°C -45°C +70°C -55°C +85C^o 5C^o per minute 38C^o to 95@ 50C^o 6g @ 11ms, 20G Random, 10-2000Hz MIL-STD-810G Drip Test 2x Line Voltage Sec 18, 19, 20, 21 IP67	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 A DO-160G Cat B DO-160G Cat U, U2 Method 511.6 DO-160G Cat W DO-160G Cat A DO-160G Cat A DO-160G Cat B DO-160G Cat B, CC, R, M DO-160G Cat A
Model Numbers	• C220301-00 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**	• TBD, • 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], Single Channel

36.81 [1.449 in]

181.00 [7.126 in]

USB   SDI Loop   SDI In   CVBS Out   VGA Out   Power

92.00 [3.622 in]

111.52 [4.391 in]