



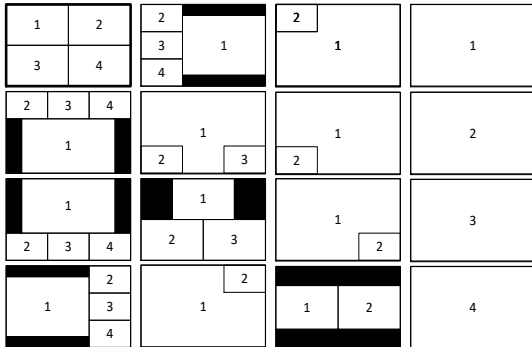
# IP68 Rated 3-G SDI Quad Video Processor

## Overview

The AVI's new rugged IP68 rated 3-G SDI Quad Video Processor is a high-performance, stand-alone unit that combines four SDI video inputs into a dual SDI and DVI/HDMI video output for display.

Any combination of up to four SD, HD, or 3-G SDI video sources can be used as input. Low latency buffering allows non-synchronous input to be scaled and processed into a dual SD, HD, or 3-G SDI and DVI/HDMI outputs in real time.

Multiple display layout configurations are available as shown below.



Stand-alone or in combination with various AVI system components, AVI's rugged 3-G SDI Quad Video Processor offers a high-

performance solution for display of all video sources, maximizing the capability of the sensor suite in use.

## Standard Features

- 4 SDI input channels
- Multiple output screen formats
- 2 3G/HD/SD SDI outputs
- 1 DVI-D or HDMI outputs
- Inputs auto detected
- Selectable or Auto output resolution and frame rates
- Each input is independent



- On-screen user labels
- User controllable functions and configurations
- Ethernet interface for control and configuration
- Rugged High-Speed DVI/HDMI circular connector
- 9 – 36 V DC Power
- Heat dissipating enclosure
- Pressure release valve for longer seal life and decompression/overpressure
- Fluorosilicone gaskets for MIL-SPEC fluid susceptibility rating
- Three year standard warranty

## Benefits

- Increased Situational Awareness - all sensor sources viewable at the same time
- 3-G SDI Switch - simple selection of any single image or quad image using AVI system control components or embedded control software
- Reduction in wiring weight and complexity – only a single cable run needed to the display and additional displays not needed
- Allows single, unified SDI cabling infrastructure on sensor platform
- Open - works with any SDI/DVI/HDMI source/display



AVI – Optimize your sensor

# IP68 Rated 3-G SDI Quad Video Processor - Specifications

<b>Video Inputs</b>	<ul style="list-style-type: none"> <li>• 3G/HD/SD SDI(4)</li> <li>• Input equalization &gt; 100m (Belden 1694A)</li> <li>• Connector type – BNC 75 Ω</li> </ul>	<b>Product Number</b>	<ul style="list-style-type: none"> <li>• Q000304-01</li> </ul>
<b>Video Outputs</b>	<ul style="list-style-type: none"> <li>• 3G/HD/SD (2) <ul style="list-style-type: none"> <li>○ Scaled</li> <li>○ Re-clocked</li> <li>○ 10 bit</li> <li>○ Connector type – BNC 75 Ω</li> </ul> </li> <li>• DVI-D/HDMI <ul style="list-style-type: none"> <li>○ 26 pin Glenair High-Speed mighty mouse</li> <li>○ RGB 4:4:4, YUV 4:2:2, YUV 4:4:4 Color Encoding</li> </ul> </li> </ul>	<b>Environmental</b>	<ul style="list-style-type: none"> <li>• Operating Temp Low -45°C DO-160G Cat B2</li> <li>• Operating Temp High +70°C DO-160G Cat B2</li> <li>• Short Term Op Temp Low -45°C DO-160G Cat B4</li> <li>• Short Term Op Temp High +70°C DO-160G Cat B4</li> <li>• Ground Survival Low Temp -55°C DO-160G Cat B4</li> <li>• Ground Survival High Temp +85°C DO-160G Cat B4</li> <li>• Temp Variation 5C° per minute DO-160G Cat B</li> <li>• Humidity 38C° to 95@ 50C° DO-160G Cat A</li> <li>• Operational Shock 6g @ 11ms, 20G DO-160G Cat B</li> <li>• Vibration Random, 10-2000Hz DO-160G Cat U, U2</li> <li>• Explosion Proofness* MIL-STD-810G Method 511.6</li> <li>• Waterproofness Drip Test DO-160G Cat Y</li> <li>• Magnetic Effect DO-160G Cat A</li> <li>• Power Input* DO-160G Cat A</li> <li>• Voltage Spike 2x Line Voltage DO-160G Cat B</li> <li>• EMI/EMC Sec 18, 19, 20, 21 DO-160G Cat B, CC, R, M</li> <li>• ESD* DO-160G Cat A</li> <li>• Ingress Rating IP68 DO160G Cat D1</li> <li>• Altitude Operating 50,000ft</li> </ul>
<b>Video Input and Output Formats</b>	<ul style="list-style-type: none"> <li>• 3G – SMPTE 424M *Input only <ul style="list-style-type: none"> <li>○ 2.97 and 2.967Gb/s</li> <li>○ 1080p@60/59.94*/50Hz</li> <li>○ Format SMPT 425M Level A</li> </ul> </li> <li>• HD – SMPTE 292M/274M/296M <ul style="list-style-type: none"> <li>○ 1.485 and 1.435Gb/s</li> <li>○ 1080i@60/59.94*/50Hz</li> <li>○ 1080p@30/29.97*/25/24/23.98*Hz</li> <li>○ 720p @60/59.94*/50/30/29.97/25/24/23.98*Hz</li> </ul> </li> <li>• SD – SMPTE 259M <ul style="list-style-type: none"> <li>○ 270Mb/s</li> <li>○ 625i@50*Hz</li> <li>• 525i@59.94*Hz</li> </ul> </li> </ul>	DO-160 Tested *By Similarity	
<b>Functions</b>	<ul style="list-style-type: none"> <li>• Output selection of quad format</li> <li>• Output format (see video output formats)</li> <li>• Input status of channel 1, 2, 3, and 4 and Channel Id overlay control</li> <li>• Quad Boarder and color and on/off</li> </ul>	<b>Dimensions and Weight</b>	<ul style="list-style-type: none"> <li>• 182 mm [7.165 in] W, 117 mm [4.6 in] D, 42.8 mm [1.685 in] H</li> <li>• 0.758kg [1.67lb]</li> </ul>
		<b>Power</b>	<ul style="list-style-type: none"> <li>• +9 to +36 DC</li> <li>• 0.24 amps</li> </ul>

