



AVI – Optimize your sensor suite.™



# 17.3" HD Rugged Multifunction Display

## Overview

AVI's D1700 HD rugged multifunction display is a true 1920x1080 resolution, 8-bit color, high-contrast, high-brightness unit that provides impressive image clarity. With a 17.3" diagonal viewing area, this light-weight 3.54 Kg (7.8 lbs) unit provides a small foot print of only 419mm x 282mm x 56mm (16.5" x 11.1" x 2.1"). The D1701 features innovative AR coated full cover glass with Projective Capacitive (PCAP) function controls, direct sunlight readable, 3G-SDI input and output, and many other outstanding features.

Enclosed in a water-tight aluminum 6061 enclosure, this rugged display provides up to four 3G-SDI inputs and one 3G-SDI loop-through output. Standard or customized button icons provide direct operator functional control for video input selection, brightness control, Day/Night/NVGS mode control, or control of other AVI products such as Quad Processors, Video Switches, and Recorders.

The 16:9 aspect ratio of the D1700 provides optimal viewing of HD video sensors. It can also be used in Portrait mode with AVI's Quad Processor allowing up to three HD images to be displayed at the same time in a space-saving configuration.

Stand-alone or in combination with various AVI system components, AVI's rugged 17.3" display offers a high performance, light weight, rugged solution for display of video sensor data. Now all sensors and mission video sources can be displayed in full HD resolution, maximizing the capability of the mission system.

## Standard Features

- 1920x1080 resolution with 8-Bit color for pristine images
- Full cover AR coated glass for optimal viewing and strength
- Optically bonded LCD and cover glass for additional strength and higher contrast
- Sealed enclosure (NMEA 6, IP67) for extreme environments
- 3G SDI video Input and Loop Through
- Direct sunlight viewable ( $\geq 1000 \text{ cd/m}^2$ )
- Brightness control



- PCAP Function buttons that will never wear out
- VESA Mount, Front Panel, or three-point mounts on all sides provides flexible mounting options
- Open command protocol over USB or TCP/IP for subsystems control and interface
- -10 C° to 60 C° operation
- Heat dissipating frame
- 9 – 36 V DC Power
- MIL-STD 38999 circular power connector
- Two year warranty

## Options

- Four 3-G SDI inputs with Loop-through
- Dual LED backlight for NVGS operation
- Portrait Mode Operation
- Full screen PCAP touch screen
- Heater glass for -20 C° to 60 C° operation



# 17.3" HD Rugged Multifunction Display - Specifications

<p><b>Video Inputs</b></p> <ul style="list-style-type: none"> <li>SD, HD, and 3-G SDI             <ul style="list-style-type: none"> <li>Connector type – BNC</li> <li>Input equalization &gt; 100m (Belden 1694A)</li> </ul> </li> </ul> <p><b>Video Outputs</b></p> <ul style="list-style-type: none"> <li>SD, HD, and 3-G SDI             <ul style="list-style-type: none"> <li>Re-clocked, 10 bit, 4:2:2 color encoding</li> <li>Connector type – BNC</li> </ul> </li> </ul> <p><b>Supported SDI Video Formats</b></p> <ul style="list-style-type: none"> <li>SMPTE 259M             <ul style="list-style-type: none"> <li>525i @ 59.94Hz (NTSC)</li> <li>625i @ 50Hz (PAL)</li> </ul> </li> <li>SMPTE 292M/296M             <ul style="list-style-type: none"> <li>720p @ 60/59.94/50Hz</li> <li>1080i @ 60/59.94/50Hz</li> </ul> </li> <li>SMPTE 425 (level A)             <ul style="list-style-type: none"> <li>1080p @ 60/59.94/50Hz</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Pixel Pitch 0.1989x0.1989mm</li> <li>Pixel Arrangement R.G.B Vertical Stripe</li> <li>Display Mode Normally White</li> <li>White Luminance ≥ 1000 cd/m2</li> <li>Contrast Ratio ≥ 600:1</li> <li>Response Time 40 msec (typ, on/off)</li> <li>Supported Colors 16.7 M</li> <li>Viewing Angles 80L, 80R, 60U, 80D</li> <li>NTSC Color 72%</li> <li>Luminance Uniformity 80%</li> </ul>
<p><b>Model Numbers</b></p> <ul style="list-style-type: none"> <li>D170101-00 1 Channel, no options</li> <li>D170104-00 4 Channel, no options</li> <li>D170201-00 1 Channel portrait mode, no options</li> <li>D170204-00 4 Channel portrait mode, no options</li> </ul> <p><b>Option Numbers</b></p> <ul style="list-style-type: none"> <li>-00 none</li> <li>-01 Touch Screen</li> <li>-02 Glass Heater</li> <li>-03 Touch Screen, Glass Heater</li> <li>-04 NVGS compliant</li> <li>-05 NVGS compliant, Touch Screen</li> <li>-06 NVGS compliant, Glass Heater</li> <li>-07 NVGS compliant, Glass Heater, Touch Screen</li> </ul>	<p><b>Environmental*</b></p> <ul style="list-style-type: none"> <li>Operating Temp Low -10°C / 14°F DO-160G Cat B4</li> <li>Operating Temp High +60° C / +140°F DO-160G Cat B4</li> <li>Short Term Op Temp Low -20°C / -4°F DO-160G Cat B4</li> <li>Short Term Op Temp High +65° C / +149°F DO-160G Cat B4</li> <li>Ground Survival Low Temp -55°C / -67°F DO-160G Cat B4</li> <li>Ground Survival High Temp +85°C / +185°F DO-160G Cat B4</li> <li>Temp Variation 5C° per minute DO-160G Cat B</li> <li>Humidity 0 to 95±4% @ 50C° DO-160G Cat A</li> <li>Operational Shock &amp; Crash 6g @ 20ms, 20g Sus DO-160G Cat A, R</li> <li>Vibration Random, 10-2000Hz DO-160G Cat U2</li> <li>EMI/EMC Sec 18, 19, 20, 21 DO-160G Cat B, CC, R, B</li> <li>Voltage Spike 2x Line Voltage DO-160G Cat B</li> <li>Waterproofness Drip Test DO-160G Cat W</li> <li>Ingress Rating IP67</li> <li>Altitude Operating 25,000ft DO160G Cat B</li> </ul> <p><small>* Design criteria. Testing to be completed.</small></p>
<p><b>Power</b></p> <ul style="list-style-type: none"> <li>+9 to +36 DC</li> <li>1.79 A @ 28V DC (full brightness)</li> <li>Connector Type MIL-STD D38999/20MB98PN</li> </ul>	<p><b>Dimensions and Weight</b></p> <ul style="list-style-type: none"> <li>419 mm [16.5 in] W, 282 mm [11.1 in] H, 56 mm [2.1 in] D</li> <li>3.54 kg [7.8lbs]</li> </ul>

