

# SV-231

## 12" smart display



Barco's SV-231 smart display combines a 12-inch, high-bright touch screen with the graphics and computing power of a rugged computer to provide a high-performance visualization processor in a compact footprint. Because of its design for SWaP-C and modular open architecture, the SV-231 is ideal for vehicle mounted C4ISR applications.

### **Extreme performance**

Barco's SV-231 smart display offers the latest proven technologies, such as a rugged analog-resistive, low-reflection touch screen and the latest generation of Intel® Core™ processors. These features are packaged to deliver optimal performance while operating in harsh environments.

### **Modular design**

The SV-231 includes 6 expansion slots based on open industry standards. This modularity allows customized IO configurations and dedicated hardware controllers to support multiple security domains.

### **Image processing and real-time performance**

The SV-231 connects to a variety of imaging and data sources to deliver enhanced situational awareness. Barco's CommonSENSE media management software supplied with the SV-231 enables hardware-accelerated GPU-based image processing with low latency for stream decoding, scaling, windowing, and recording for after-action review and embedded training. The SV-231 can be optionally equipped with the Barco Video XMC Board for hard real-time video inputs directly to the screen.

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**Product specifications****SV-231**

<b>General specifications</b>	
<b>Panel size</b>	12.1" diagonal, 16:10 aspect ratio
<b>Resolution</b>	1280 x 800 (WXGA)
<b>Color depth</b>	6 bits/color, 8 bits/color with patented dithering algorithm
<b>Brightness</b>	Day mode: min. 680cd/m <sup>2</sup> / 200fL Night Mode: max 3.43cd/m <sup>2</sup> / 1.0fL, dimmable to black
<b>Contrast ratio</b>	700:1 (dark environment)
<b>Dimming ratio</b>	Typ. > 400:1
<b>HMI</b>	4 control keys 32 Function keys Rugged AR high-resolution touch screen
<b>Computing</b>	Intel® Dual-Core™ i7-3555LE, 2x 2.5GHz, 16GB RAM
<b>Graphics card</b>	Integrated Intel® HD Graphics 4000
<b>Storage capacity</b>	128GB Field Removable SSD, SATA 3.1 compliant (6Gb/sec)
<b>Inputs - Outputs</b>	1x Intel PRO1000 Gigabit Ethernet port 4x USB 2.0 4x serial lines (RS232/RS422/RS485) 2x CAN bus (ISO 11898, CAN 2.0 A/B, and J1939 compliant) HD audio in/out/micro 4x video inputs RS170, PAL/NTSC 4x GPIO + PTT I/O isolated or buffered as applicable
<b>Option slots</b>	1x MXM 1x XMC 4x miniPCIe
<b>Operating system</b>	Microsoft Windows 7 Ultimate for Embedded Systems, 64-bit
<b>Power Supply</b>	MIL-STD-1275D compliant
<b>Power consumption</b>	Power consumption 50W typ., 80W max (without heaters)
<b>Dimensions</b>	286 x 254 x 68 mm / 11.25" x 10.0" x 2.66" (w x h x d)
<b>Weight</b>	5.9 kg / 13 lbs
<b>Environmental</b>	(MIL-STD-810G) Operating temperature: -46 to +65 °C (+71°C with limitations) Storage temperature: -51 to +71 °C Humidity: 95%, 60 °C Altitude: 40,000ft operating, 50,000ft non-operating Salt fog: 48-hours, 5% concentration Sand and dust: blowing sand/dust Ingress protection: 1 meter immersion for 30 minutes Vibration: Tracked Vehicle profile Shock: 40g, 23ms (6 shocks/axis)
<b>EMI / EMC</b>	(MIL-STD 461F) Ground army
<b>Options</b>	
<b>Rugged front filter (replaces touch screen)</b>	Chemically-strengthened glass Front (optical) bonding Highly Efficient (HE) Anti-Reflective (AR) coating
<b>CPU and memory upgrade</b>	Intel® Dual-Core™ i3-3120ME, 2x 2.4GHz, 16GB RAM
<b>Graphics upgrade</b>	AMD® MXM E6760 GPU
<b>Storage upgrade</b>	256GB Field Removable SSD, SATA 3.1 compliant (6Gb/sec)
<b>Barco Video XMC Board (VXB)</b>	4x PAL/NTSC Video 1x RGB Input 2x HD-SDI Inputs 1x Gigabit Ethernet (GigE Vision or DEF-STAN 00-82 streaming) Gen-locking Real-Time video input to screen
<b>Dual GigE miniPCIe</b>	2x Intel PRO1000 Gigabit Ethernet ports

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<b>Operating systems</b>	Microsoft Windows XP, 32-bit RedHat Linux Enterprise Linux 6.x, 64-bit
<b>Barco CommonSENSE Advanced</b>	Includes advanced image processing functions such as fusion, stabilization, and warping (lens correction)
<b>Real-time clock battery</b>	Battery and Battery Holder
<b>Stylus kit</b>	Stylus, Holder, Tether
<b>Rugged keyboard</b>	Includes integrated pointing device