

# MDU-268

## 6x8 inch avionics-grade Mission Display Unit



### Main features:

- High-resolution 6 x 8 inch XGA screen (> 125 dpi)
- Multiple configurable inputs:
  - 1 Digital video input (DVI)
  - Up to 6 analog video inputs
- Night vision compatibility (optional)
- Unique state-of-the-art LED backlight
- Extra wide viewing angle
- Input resolution from VGA to XGA
- Very compact design
- Extensive Built-In Test (BIT)
- RS422 ext. keyboard communication
- Ambient luminance control
- Compatible with Barco MOSArt™ processing unit
- Configurable softkey legend via OSD

The MDU-268 is an avionics-grade 6x8 inch Mission Display Unit derived from Barco's field-proven CHDD family. The MDU-268 has both a digital video input (DVI) and most of the currently available analog video inputs (Composite, RGB, STANAG,...). Equipped with the latest, sunlight-readable AMLCD technology, the MDU-268 delivers excellent brightness and contrast values, as well as a wide viewing angle of 80° in all directions. It allows the same unit to be used in portrait as well as landscape mode.

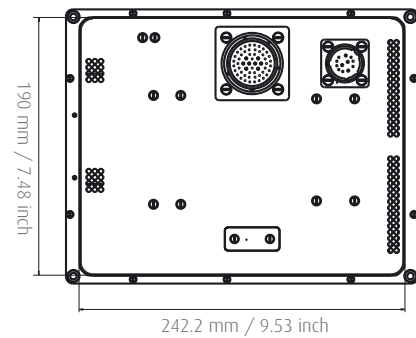
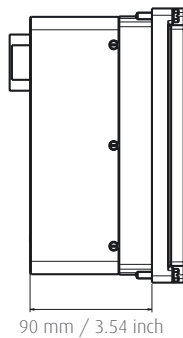
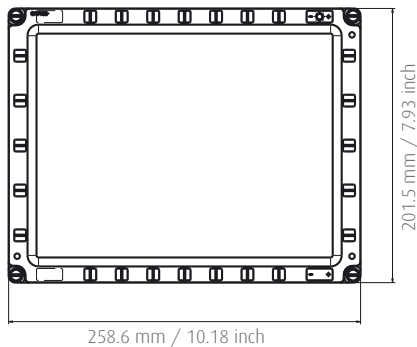
The use of advanced electronics has enabled a very compact footprint (maximum 4" depth) and low power consumption. Because of this, the MDU-268 can be integrated in virtually any cockpit or cabin environment.

Compatible with FLIR, daylight video cameras, moving maps, computers and radar, the MDU-268 Display Unit offers a dedicated imaging solution, wherever your mission takes you. The unit is DO-178B and DO-254 certified up to level C for the DVI input.

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# Technical specifications



## GENERAL DATA

Power supply: 28 Vdc, MIL-STD-704A  
 Power consumption: 70W at 150 fL (operating)  
 Extreme low temperature start with heater: 150W (typ.)  
 Weight: 3.8 kg / 8.4 lbs  
 Cooling: Internal fans  
 MTR: Less than 0.5 Hours  
 Built-In Testing: IBIT, CBIT, PBIT  
 Software: RTCA/DO-178B  
 Hardware: RTCA/DO-254

## ELECTRO OPTICAL

Panel type: AMLCD (Silicon TFT)  
 Panel active area: 158.2 x 211.1 mm / 6.23 x 8.31 inch  
 Panel resolution: 1024 x 768 (XGA)  
 Screen specifications: 262,144 colors  
 64 grayscales  
 (253 grayscales with dithering)  
 Brightness: White surface luminance 250 fL,  
 856 cd/m<sup>2</sup>  
 Contrast ratio: >400:1 @ dark environment  
 >7:1 @ 10,000 fc  
 Anti reflection: Multilayer coating MIL-C-14806A  
 Colors: Extended color gamut thanks to LED  
 backlight  
 Color temperature: >5000 K  
 White uniformity: better than 30%  
 Viewing angle: Horz: +/-80°, Vert: -80°/+80°

## CONTROLS

Controls (front): Brightness, Up/Down rocker switch  
 Automatic Light Control  
 Keys: Programmable softkeys

## IMAGE PROCESSING

Functionality: Picture-In-Picture (optional), scaling,  
 rotating, image dithering for high-  
 precision grayscale rendering

## INTERFACES

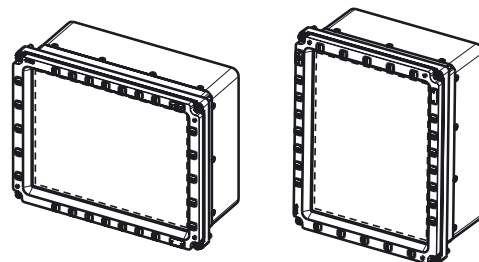
Inputs: 1 DVI digital video  
 Analog video (maximum 6,  
 depending on format, including  
 custom video timings)  
 RS-170, NTSC, PAL, VGA to XGA RGB  
 (SoG or +H, +V), STANAG 3350A,  
 3350B & 3350C  
 I/O: RS422 communication for keyboard,  
 status; video source/mode and OSD  
 control

## ENVIRONMENTAL

Compliance: RTCA/DO-160E  
 High temperature: +55°C / +131°F operational  
 +71°C / +160°F (30 mins)  
 -40°C / -40°F operational  
 Low temperature: 50,000 ft (operational)  
 Altitude: 5 min.  
 Warm-up time: 10 min. full specs  
 Operational: Up to 95% RH; 60°C condensing  
 Humidity: DO-160E  
 Vibration: 20 g  
 Shock: 40 g  
 Crash safety: MIL-STD-461D/462D  
 EMI/EMC: 15,000 hrs (AIC)  
 MTBF (calculated):

## OPTIONS

- Keyless bezel
- NVG compatibility: MIL-STD-3009



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