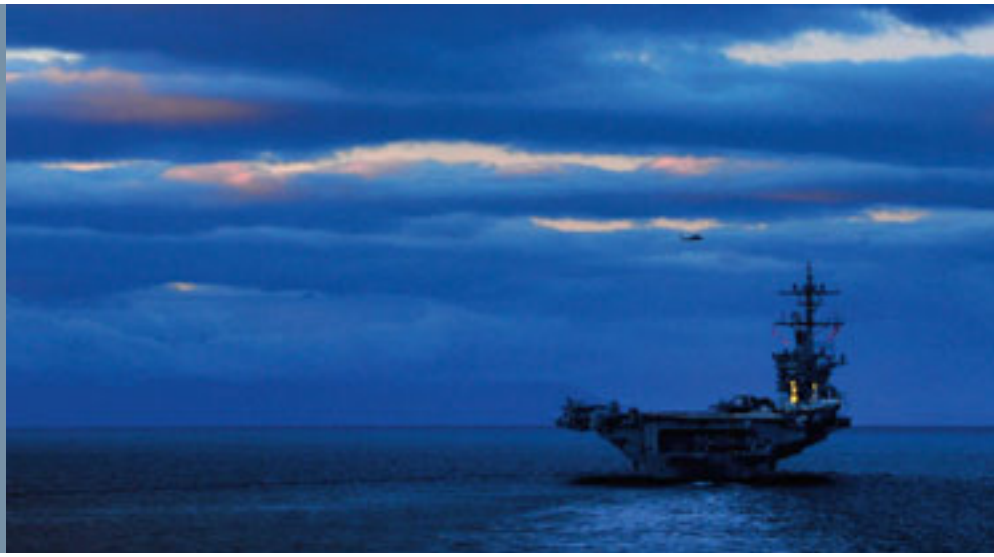
RFD-357

Rugged flat panel display for naval applications



Barco's RFD-357 was designed specifically to meet the harsh requirements of naval military forces. Offering superior 10-bit image quality under all conditions, this flat high resolution wide-screen display is suited to be used in combination with a wide range of sensors – including hi-res sensors. The rugged design, small footprint and long term support make the RFD-357 the perfect visualization solution for all military vessels.

BARCO

Visibly yours

A flat panel display designed for demanding naval applications

Features & benefits:

- Thin 22,5" wide-screen LCD
- 1920 x 1200 resolution
- Superior 10-bit image quality
- Specifically designed for long term support
- Qualified for MIL-S-901D naval shock requirement
- Proprietary highly efficient LED backlight
- Top of the line LCD flicker compensation
- Fully sealed, fan-less design
- Highly accurate optical touch screen (optional)

Superior image quality

The RFD-357's innovative, highly efficient proprietary Barco LED backlighting solution offers a large number of advantages, including a longer lifetime, increased shock and vibration performance, stable light output in any thermal condition and extremely high dimming ratio. Combined with the 10-bit 120 Hz LCD, the RFD-357 delivers exceptional image quality to every vessel under all circumstances. Even demanding hi-res sensor images – including HD FLIR cameras – are displayed without a problem.

Sealed, fan-less and thin design

The intelligent design of the RFD-357 allows for a reduced depth of the unit – without any quality compromises. Although this display is completely fan-less, the intelligent thermal management system allows the fully sealed RFD-357 to be used in ambient conditions up to 50°C. Furthermore, the patented backlighting concept, more specific the way the light from the LED is guided to the back of the LCD, is another significant source of total depth reduction.

Long term supportability

Thanks to the careful selection of components, the RFD-357 will be a long term supportable product. Barco can guarantee a support of up to 7 years without any product changes.

901D shock compliancy

In order to become the most reliable display on the market, the RFD-357 was specifically designed and qualified to cope with the MIL-S-901D, Grade A shock requirements for surface and subsurface naval applications – the toughest naval shock specification in the world. Next to this shock requirement, the display is fully qualified towards MIL-STD-810F and MIL-STD-461F and suited to be used in ECDIS systems.

LCD flicker compensation

LCD flicker, a common cause for eye-fatigue and interpretation errors, is eliminated by Barco's unique patented LCD Flicker Compensation (LFC) solution. This allows operators to view images with high contrast and high density (such as sonar or dense tactical data) without distracting flicker effects.

Optional touch screen

Optionally, Barco's RFD-357 comes with high-performance touch screen functionality, allowing fluent drag and drop actions operated with any available stylus device. The optical touch technology used excels with high touch accuracy, dust and water resistance and has no impact whatsoever on the display's optical performance.

Technical specifications RFD-357

RFD-357		
Panel size		22,5" wide-screen LCD
Aspect ratio		16:10
Resolution		1920 x 1200
Inputs		
Signal inputs		DVI-D, VGA, Video (3x CVBS or 1x Y/C + 1x CVBS or 1x YPbPr)
Serial port		RS-232/RS-422 communication (9 pin sub D)
USB port		USB communication (USB Type B receptacle)
Ethernet port		Maintenace port (RJ-45 receptacle)
Controls & indicators		
Controls		TOUCH DISABLE / INPUT / F KEY / DOWN / UP / SEL / QUIT / STANDBY
		In conjunction with OSD
Indicators		Green 'Power' LED, Red 'Overtemp' LED, Red 'Fault' LED
OSD		On-screen display
Power		
Power supply		115 - 220 VAC (47 - 63 Hz)
Connector		MIL-C-38999 serie I
Power consumption		80W typical
Environmentals		
Operating temperature	MIL-STD-810F	Low temp: 0°C (-25°C with heater option)
		High temp: +50°C
Storage temperature	MIL-STD-810F	Low temp: -40°C
		High temp: +70°C
Relative humidity	MIL-STD-810F	Operating & storage: 95% @ 40°C non condensing
Ingress protection		IP 64
Altitude low pressure	MIL-STD-810F	Operating: up to 25.000 ft (376 mbar)
		Storage: up to 40.000 ft (187 mbar)
Vibration		Ships MIL-STD-167-1, Type 1
		Airborne 2g sine vibration, MIL-E-5400T Fig.2, curve IIa (sheet 2 of 3)
Shock		30g - 12,5 ms half sine MIL-STD-810F
		Qualified towards MIL-S-901D LW Grade A Class 1
EMI/EMC	MIL-STD-461F	Navy applications

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