

# DM-1126 / PM-1126 / VCM-1101



## 10" vetronics display system

### Main features & benefits:

- High level of ruggedization
- Unique front bonding technology keeps the display condensation-free and provides superior optical performance at all times
- Split design for easy integration into confined spaces and consoles
- 20 user-definable function buttons
- Uncompromised thermal vision capability in high resolution
- Symbol Generator for dynamic graphics overlay
- On-Screen Display for text overlay
- Rapid HMI development and customization with ACTEV
- Serial control of peripheral devices
- CAN-Bus communication

Barco's 10" flat panel display system has been specifically designed for observation and driver enhancement on board rugged vehicles. Barco's rugged vetronics displays are available in a split configuration or as a single unit. The split configuration combines a 10" 800 x 600 SVGA Panel Module (PM-1126) with a Video Control Module (VCM-1101), connected by means of a single cable. Thanks to the split design, the VCM-1101 can be placed in a remote location, requiring less space. Barco's Display Module (DM-1126) unites the PM-1126 and the VCM-1101 into a single ruggedized unit.

Barco's 10" vetronics display system can handle a wide range of external RGB and video sources, including digital maps and FLIR. Furthermore, the display offers extensive functionality, including 20 user-definable function buttons, a powerful symbol generator for fast graphics overlay and on-screen display functionality. The display system offers the option of ACTEV, Barco's easy-to-use software development tool that allows to implement the end-user's desired functionality into the display system by assigning actions to events. It allows system integrators to generate customized software applications, fully tailored to their clients' needs.

**BARCO**

Visibly yours

# Technical specifications

## ELECTRO OPTICAL

Panel type:	Color a-Si TFT Active Matrix LCD
Panel size:	10.4" (260 mm)
Panel resolution:	SVGA - 800 x 600 pixels
Pixel dimensions:	0.264 mm (H) x 0.264 mm (V)
Image dimensions:	211.2 mm x 158.4 mm (8.315" x 6.236")
Panel specifications:	16M colors (with dithering) 256 grayscales (with dithering)
Brightness:	
Basic:	Max. 300 cd/m <sup>2</sup> (92.4 fL) typical
EMI Mesh:	Max. 280 cd/m <sup>2</sup> (86.2 fL) typical
Contrast ratio:	300:1 @ dark environment
Dimming ratio:	Typ. 400:1
White uniformity:	Typ. 25% non-uniformity
Viewing angle:	Horizontal @ CR = 10 ± 70° Vertical @ CR = 10 + 40° / - 70°

## INPUTS

Video:	Standard 2 differential inputs Optionally up to 4 (PAL, NTSC, STANAG B, STANAG C)
Communication:	3 serial channels, switchable between: RS-232 and RS-422 1 CAN-Bus 2.0B, High Speed, Active per ISO 11898
Connectors:	MIL-C-38999/3

## OUTPUTS

Video:	1 slave output, non-differential 1 recorder output, non-differential
--------	---

## MECHANICAL DATA

Mounting:	4 X M6 captive bezel bolts
Orientation:	All orientations
Weight:	
DM-1126:	Max. 6 kg (13.2 lbs)
PM-1126:	Max. 4 kg (8.8 lbs)
VCM-1101:	Max. 3.3 kg (7.3 lbs)
Cooling:	Natural convection, no fans installed
Dimensions:	(WxH) 300 mm (11.811") x 240 mm (9.449")
Depth:	
DM-1126:	95 mm (2.74")
PM-1126:	54 mm (2.13")
VCM-1101:	53 mm (2.09")

## POWER

Power supply:	28 VDC	MIL-STD-1275B
Max. Power consumption:		
Without Symbol Generator:	145 W	
With Symbol Generator:	150 W	

## ENVIRONMENTAL

Low operating temp.:	- 25°C / -13°F	MIL-STD-810F
High operating temp.:	+55°C / +131°F	MIL-STD-810F
	+71 °C / + 160 °F for 30 minutes	
Low storage temp.:	-30°C / -22°F	MIL-STD-810F
High storage temp.:	+75°C / +167°F	MIL-STD-810F
Humidity:	93% @ +45°C / +113°F condensing	STANAG 2895
Vibration:	Sine Vibration	MIL-STD-810F
	Random Vibration (all terrain vehicles)	
Shock:	55 g-12.5 ms half sine	MIL-STD-810D
EMI/EMC:	Ground-Army	MIL-STD-461D
Drip proof:	Water-Immersion	MIL-STD-810F
Altitude (operating):	Up to 4,000 m	STANAG 2895
Altitude (storage):	Up to 10,000 m	MIL-STD-810F
Sand & dust, salt fog:	comply at unit level	MIL-STD-810F
MTBF:	10,000 hours	MIL-HDBK-217F
	GM 40°C	

## OPTIONAL ENVIRONMENTAL SPECIFICATIONS

Low operating temp.:	- 46°C / - 51°F	MIL-STD-810E
High operating temp.:	+63°C / + 145°F	MIL-STD-810E
	+71 °C / + 160 °F for 30 minutes	
Low storage temp.:	-51°C / -60°F	MIL-STD-810E
High storage temp.:	+75°C / +167°F	MIL-STD-810E
Humidity:	100% @ +45°C / +113°F condensing	MIL-STD-810E
Altitude (operating):	Up to 10,000 m	MIL-STD-810E

## CONTROLS & INDICATORS

Bezel controls:	20 programmable function buttons Push button, metal dome Programmable, dimmable backlight and key status indicators
-----------------	--

## ACTEV TOOLBOX

Both the DM-1126 (SG) and the PM-1126 (SG) - VCM-1101 are fully ACTEV compatible.

## OPTIONS

Symbol Generator:	For complex and dynamic graphical overlay
RGB:	1 differential input
Supported resolutions:	VGA up to SVGA
CAN-Bus:	Dual redundant CAN-Bus
CAN-Bus Protocol:	MilCAN
Touch Screen:	For more information, please contact Barco.
Front mesh:	DEF STAN 59-41 compliant

## Barco

Pres. Kennedypark 35 - B-8500 Kortrijk, Belgium  
Phone: +32 56 233 412 - Fax: +32 56 233 013  
E-mail: sales.defense@barco.com

## Barco Federal Systems Corporation

3059 Premiere Parkway - Duluth, Georgia, 30097-4905, USA  
Phone: +1 678 475 8000 - Fax: +1 678 475 8100  
E-mail: sales.defense@barcofederal.com

## BarcoView-TEXEN

7 Rue Roger Camboulives - BP 1226 - F-31037 Toulouse, France  
Phone: +33 5 34 63 71 74 - Fax: +33 5 34 63 70 20



In search of continuous improvement

K5906068 rev.00.01 0806

Technical specifications are subject to change without prior notice

www.barcodefense.com

**BARCO**

Visibly yours