

# CDMS-3000

## Control Display & Management System



### Main features:

- 3 x 4 inch sunlight-readable color display
- 640 x 480 standard resolution (VGA)
- NVG compatible
- Compact 6.75" high design
- Various interface capabilities:
  - Front mini-USB and/or remote USB
  - Video composite input
  - ARINC 429
  - MIL-STD-1553B
  - Ethernet (100/10 Mbit)
- Unique LED backlight technology
- Usable as data loader
- Extensive Built-In-Testing (BIT)
- MOSArt™ support (CDMS-3702)
- Compatible with customer-specific software
- Optional 7s memory hold (CDMS-3702)

CDMS-3000 is the next generation Control Display & Management System, featuring a pioneering 3 x 4 inch AMLCD panel with VGA resolution. Equipped with the latest display technology, the advanced CDMS-3000 combines high brightness and contrast with compact dimensions, low weight and excellent energy efficiency.

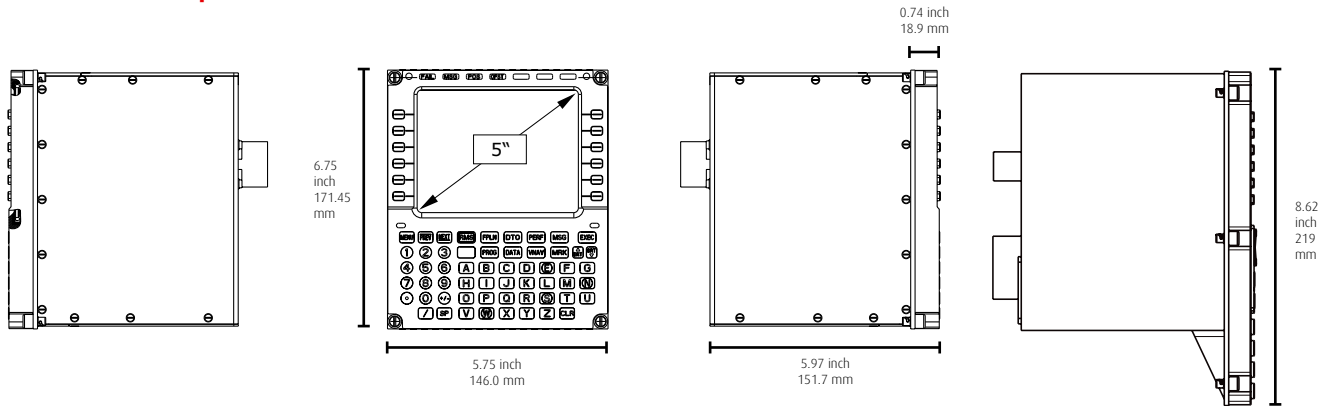
The CDMS-3000 comes as a complete product family, including the civil CDMS-3739 (ARINC 739), the military-oriented CDMS-3753 (combo ARINC-429 and MIL-STD-1553), and the versatile CDMS-3702, which hosts Barco's unique MOSArt platform. This MOSArt-equipped version allows customers to develop or integrate their own application (e.g. FMS or mission solution) on the flexible CDMS-3000 platform. What's more, the CDMS-3000 can also be operated as a data loader, thanks to its wide variety of high-speed interfaces.

Various keyboards with different engravings and/or colors are available to facilitate integration into a diversity of new and retrofit cockpit configurations. A cold wall air cooling system ensures optimum reliability and a low life cycle costs, even in the harshest operating environments.

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# Technical specifications



## ELECTRO OPTICAL

Panel type:	Active Matrix LCD (Silicon TFT)
Panel active area:	12.7 cm / 5 inch diagonal
Pixel dimensions:	0.16 mm H x 0.16 mm V
	Vertical stripe RGB, 160 PGPI
Panel resolution:	640 x 480 pixels (VGA)
Image dimensions:	102.2 x 74.8 mm / 4.02" x 2.94" (4/3)
Screen specifications:	262,144 colors - 64 grayscales
Brightness:	160 fL
White Luminance:	656 cd/m <sup>2</sup>
Contrast ratio:	> 400:1 @ dark environment
	> 10:1 @ 10,000 fC
Anti reflection:	Multilayer coating, MIL-C-14806
NVG:	MIL-STD-3009 Type I, Class B NVIS (option)
Viewing angle:	Hor: ± 45°
	Vert: +30°/-15°

## INTERFACES

Ethernet:	2 (option)
USB:	1 front/1 rear (option)
Discrete I/O:	8 I / 4 O (up to 32 as option)
CDMS-3739:	8 A429 Inputs
	3 A429 Outputs
CDMS-3753:	Single dual redundant MIL-STD-1553B (double DR as option)
	8 A429 Inputs
	3 A429 Outputs
	(24 A429 I / 8 A429 O as option)
CDMS-3702:	24 A429 I / 8 A429 O
	32 discrete
	2 A708 Inputs

## CONTROLS

Controls (front):	Brightness, Up/Down rocker switch
Function keys:	15
Annunciators:	Up to 6 above the display
	1 on each side of the first line of function keys
Softkeys:	12 (6 left, 6 right of the display)
Keyboard:	Full alphanumeric keyboard
Automatic light contr.:	2 light sensors

## PROCESSING

Processor:	PowerPC
Memory:	128 MB SDRAM ECC memory,
	256 MB (CDMS-3702)
	128 MB Flash memory,
	256 MB (CDMS-3702)
	128kB NVRAM

## GENERAL DATA

Power supply:	Dual 28 Vdc, MIL-STD-704/RTCA/DO-160E
Keyboard light cont.:	5 Vdc
Annunc. light cont.:	5 Vdc
Power consumption:	35 W (nominal) / 70 W (cold start)
Weight:	3 kg / 6.6 lb (CDMS-3739)
Cooling:	Forced air cooling via cold wall
MTRR:	Less than 0.5 hours
MTBF (calculated):	11,500 hrs (CDMS-3702 - AIC 35°C)
	5,300 hrs (CDMS-3702 - ARW 35°C)
Built-In Testing:	IBIT, CBIT, PBIT
Software:	RTCA/DO-178B level B

## ENVIRONMENTAL

Compliance:	RTCA/DO-160E (MIL-STD-810E as option)
High temperature:	+70°C operational, DO-160E Sect. 4 Cat B2
Low temperature:	-45°C operational, DO-160E Sect. 4 Cat B2
Operational at -45°C:	1 min usable
	5 min. full specs
Temp. storage:	-55°C/-67°F up to +85°C/+185°F
Altitude:	DO-160E Sect. 4 50,000 ft
Humidity:	DO-160E Sect. 6 Cat B
Shock:	20 G - 11 ms, DO-160E Sect. 7 Cat B
Vibration:	DO-160E Sect. 8 Cat R (G), S (M)
EMI/EMC:	DO-160E

TSO C113

## OPTIONS (common to all versions)

- USB interface and ARINC 615/ARINC 615 A data loading
- Ethernet interface
- NVIS compatibility
- Keyboard color and engraving change
- Additional discretes
- 50 ms power drop
- 7 sec. application backup
- For other custom options, please contact Barco.

Barco

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