

Advanced Visualization

CDMS-3000

Control Display & Management System



Main features:

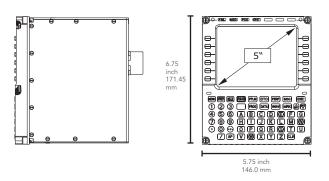
- 5.75" DZUS rack mountable
- Two keyboard sizes
- 3" x 4" sunlight-readable color display
- 640 x 480 standard resolution (VGA)
- NVG compatible
- Compact 6.75" high design
- Various interface capabilities:
 - USB 2.0 on request
 - Video composite input on request
 - Discretes
 - ARINC 429
 - MIL-STD-1553B
 - Ethernet (100/10 Mbit)
- Unique LED backlight technology
- Usable as data loader
- Extensive Built-In-Testing (BIT)
- MOSArt[™] support (CDMS-3702)
- Compliant with DO-178B up to level B
- Compatible with customer-specific software
- 7s memory hold (CDMS-3702) on request

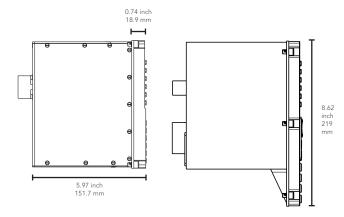
CDMS-3000 is ScioTeq's latest generation Control Display & Management System, featuring a 3 x 4 inch AMLCD panel with VGA resolution. Equipped with the latest display technology, the advanced CDMS-3000 combines high brightness and contrast with compact dimensions, low weight and excellent energy efficiency.

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-370x, which hosts ScioTeq'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.

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

Technical specifications





CDMS-3000	
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
Contrast ratio	> 400:1 @ dark environment > 10:1 @ 10,000 fC
Anti reflection	Multilayer coating, MIL-C-14806
NVG compatibility	MIL-STD-3009 Type I, Class B NVIS (option)
Viewing angle	Hor: ± 45° Vert: +30°/-15°
Interfaces	
Arinc 739 only versions	
Discrete Inputs:	8 CDMS-3739 (up to 22 on other versions)
Discrete Outputs:	1 CDMS-3739 (up to 11 on other versions)
A429 Inputs	8 CDMS-3739 (up to 24 on other versions)
A429 Outputs	3 CDMS-3739 (up to 11 on other versions)
Additional I/O on other versions	
Single dual redundant	
MIL-STD-1553B	RT or BC (double dual redundant on request)
A708 Inputs	Up to 2 (on request)
USB	1 rear (on request)
Ethernet	2 (option)
Contact ScioTeq to discuss your interface requirements.	
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

Processing	
Processor	PowerPC
Memory	128 MB SDRAM ECC memory, (optional 256 MB) 128 MB Flash memory (optional 256 MB) 128 kB NVRAM (optional 256 kB)
General specifications	
Power supply	Dual input 28 Vdc, DO-160E
Keyboard light contr.	5 Vd
Annunc. light contr.	5 Vdc
Power consumption	35 W (nominal) / 70 W (cold start)
Weight	3 kg / 6.6 lb (CDMS-3739)
Cooling	Fan-based cooling via cold wall
MTTR	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 conditions	
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)

Keyboard color and engraving changeFor other custom options, please contact ScioTeq

Small or large keyboardNVIS compatibility

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Please contact ScioTeq for availability

Automatic light contr.

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2 light sensors

The information and data given are typical for the equipment described. However any individual item is subject to change without any notice.



