HUMAN/MACHINE INTERFACES & MONITORS

High Quality, Rugged Military Display

Developed primarily for applications where operator viewability The 29LMV Series of LCD monitors have been designed to comply with military specifications to make it suitable for use within vehicles and areas where shock and vibration are key criteria.

The LCD monitor module is housed in a rugged, painted aluminium metal case and is mounted through rear fixing points. EMC considerations include the use of extensive shielding.

The DC monitor has been designed to accept a wide range of signal timings from VGA to XGA, and set-up controls for fine-tuning of the display are located at the rear of the monitor. Once set, no further adjustments should be required and the last setting is stored in memory.

Features

- Helioview[™] transflective panel for sunlight readability
- XGA / SVGA / VGA compatible
- Designed to comply with military specifications
- Resistive touchscreen
- Deep dimming for dark environment operation
- Mounting using 6 x M5 bushes, 10mm depth
- IP67 sealed
- Multiple user assignable buttons: RS422
- Colour: BS381/285 Nato Green, smooth eggshell

12.1" LCD Heads for use in Military Vehicles 29LMV124DR32MPT



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Type a-Si TFT Max. Resolution 1024 x 768 pixels Active Display Area 245.76 x 184.32mm Brightness 400/m² Backlight CCFL x 2 Backlight ife 50,000 hrs typical Transflective Helioview™ 1500cd/m² equivalent in direct sunlight Contrast Ratio 600:1 typical Viewing angles (at CR>10) 140°H, 95°V Nr. of colours 16.7M Response Time 16ms Signal Inputs Video Data Input Connectors MIL-Spec Interface LVDS Multiscan Support 1024 x 768 XGA, 800 x 600 SVGA, 640 x 480 VGA Horizontal Scan 31 - 60kHz Vertical Scan 50 - 70Hz Clock Rate 80MHz max Controls Brightness, OSD Touchscreen Resistive / RS422 Power Inputs DC Model 18 - 36V DC Power Consumption 30W (normal operation 15-20W) 50W to raise from -40°C Physical / Environmental Dimensions (approx) 2.5kg Operating Temperature: -40 to 60°C Storage Temperate -40 to 70°C Approvals Pat numbers Model 29LMV124DR32MPT	Display Specifications	
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Brightness 400/m² Backlight CCFL x 2 Backlight life 50,000 hrs typical Transflective Helioview™ 1500cd/m² equivalent in direct sunlight Contrast Ratio 600:1 typical Viewing angles (at CR>10) 140'H, 95'V Nr. of colours 16.7M Response Time 16ms Signal Inputs Video Data Input Connectors MIL-Spec Interface LVDS Multiscan Support 1024 x 768 XGA, 800 x 600 SVGA, 640 x 480 VGA Horizontal Scan 31 - 60kHz Vertical Scan 50 - 70Hz Clock Rate 80MHz max Controls Brightness, OSD Touchscreen Resistive / RS422 Power Inputs DC Model 18 - 36V DC Power Consumption 30W (normal operation 15-20W) SoW to raise from -40'C Physical / Environmental Dimensions (approx) 2.5kg Operating Temperature: -40 to 60'C Storage Temperate -40 to 70'C Approvals Part numbers	Max. Resolution	1024 x 768 pixels
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Nr. of colours Response Time 16ms Signal Inputs Video Data Input Connectors MIL-Spec Interface LVDS Multiscan Support 1024 x 768 XGA, 800 x 600 SVGA, 640 x 480 VGA Horizontal Scan 31 - 60kHz Vertical Scan 50 - 70Hz Clock Rate 80MHz max Controls Brightness, OSD Touchscreen Resistive / RS422 Power Inputs DC Model 18 - 36V DC Power Consumption 30W (normal operation 15-20W) 50W to raise from -40°C Physical / Environmental Dimensions (approx) Weight (approx) 2.5kg Operating Temperature: -40 to 60°C Storage Temperate -40 to 70°C Approvals Part numbers	Contrast Ratio	600:1 typical
Response Time 16ms Signal Inputs Video Data Input Connectors MIL-Spec Interface LVDS Multiscan Support 1024 x 768 XGA, 800 x 600 SVGA, 640 x 480 VGA Horizontal Scan 31 - 60kHz Vertical Scan 50 - 70Hz Clock Rate 80MHz max Controls Brightness, OSD Touchscreen Resistive / RS422 Power Inputs DC Model 18 - 36V DC Power Consumption 30W (normal operation 15-20W) 50W to raise from -40°C Physical / Environmental Dimensions (approx) 380 x 320 x 50mm Weight (approx) 2.5kg Operating Temperature: -40 to 60°C Storage Temperate -40 to 70°C Approvals Part numbers	Viewing angles (at CR>10)	140°H, 95°V
Signal Inputs Video Data Input Connectors MIL-Spec Interface IVDS Multiscan Support 1024 x 768 XGA, 800 x 600 SVGA, 640 x 480 VGA Horizontal Scan 31 - 60kHz Vertical Scan 50 - 70Hz Clock Rate 80MHz max Controls Brightness, OSD Touchscreen Resistive / RS422 Power Inputs DC Model 18 - 36V DC Power Consumption 30W (normal operation 15-20W) 50W to raise from -40°C Physical / Environmental Dimensions (approx) 380 x 320 x 50mm Weight (approx) 2.5kg Operating Temperature: -40 to 60°C Storage Temperate -40 to 70°C Approvals Part numbers	Nr. of colours	16.7M
Video Data Input Connectors MIL-Spec Interface LVDS Multiscan Support 1024 x 768 XGA, 800 x 600 SVGA, 640 x 480 VGA Horizontal Scan 31 - 60kHz Vertical Scan 50 - 70Hz Clock Rate 80MHz max Controls Brightness, OSD Touchscreen Resistive / RS422 Power Inputs DC Model 18 - 36V DC Power Consumption 30W (normal operation 15-20W) 50W to raise from -40°C Physical / Environmental Dimensions (approx) 380 x 320 x 50mm Weight (approx) 2.5kg Operating Temperature: -40 to 60°C Storage Temperate -40 to 70°C Approvals MIL-STD-810F MIL-STD-1275-B MIL-S	Response Time	16ms
Input Connectors MIL-Spec Interface LVDS Multiscan Support 1024 x 768 XGA, 800 x 600 SVGA, 640 x 480 VGA Horizontal Scan 31 - 60kHz Vertical Scan 50 - 70Hz Clock Rate 80MHz max Controls Brightness, OSD Touchscreen Resistive / RS422 Power Inputs DC Model 18 - 36V DC Power Consumption 30W (normal operation 15-20W) 50W to raise from -40°C Physical / Environmental Dimensions (approx) 380 x 320 x 50mm Weight (approx) 2.5kg Operating Temperature: -40 to 60°C Storage Temperate -40 to 70°C Approvals Designed to comply MIL-STD-810F MIL-STD-1275-B M	Signal Inputs	
Interface LVDS Multiscan Support 1024 x 768 XGA, 800 x 600 SVGA, 640 x 480 VGA Horizontal Scan 31 - 60kHz Vertical Scan 50 - 70Hz Clock Rate 80MHz max Controls Brightness, OSD Touchscreen Resistive / RS422 Power Inputs DC Model 18 - 36V DC Power Consumption 30W (normal operation 15-20W) 50W to raise from -40°C Physical / Environmental Dimensions (approx) 380 x 320 x 50mm Weight (approx) 2.5kg Operating Temperature: -40 to 60°C Storage Temperate -40 to 70°C Approvals Designed to comply MIL-STD-810F MIL-STD-1275-B MIL-STD-1275-B MIL-STD-1275-B MIL-STD-1275-B MIL-STD-1275-B MIL-STD-461E CE	Video	Data
Multiscan Support Horizontal Scan 31 - 60kHz Vertical Scan 50 - 70Hz Clock Rate 80MHz max Controls Brightness, OSD Touchscreen Resistive / RS422 Power Inputs DC Model 18 - 36V DC Power Consumption 30W (normal operation 15-20W) 50W to raise from -40°C Physical / Environmental Dimensions (approx) 380 x 320 x 50mm Weight (approx) 2.5kg Operating Temperature: -40 to 60°C Storage Temperate -40 to 70°C Approvals Designed to comply MIL-STD-810F MIL-STD-1275-B MIL-STD-1275-B MIL-STD-461E CE Part numbers	Input Connectors	MIL-Spec
Horizontal Scan 31 - 60kHz Vertical Scan 50 - 70Hz Clock Rate 80MHz max Controls Brightness, OSD Touchscreen Resistive / RS422 Power Inputs DC Model 18 - 36V DC Power Consumption 30W (normal operation 15-20W) 50W to raise from -40°C Physical / Environmental Dimensions (approx) 380 x 320 x 50mm Weight (approx) 2.5kg Operating Temperature: -40 to 60°C Storage Temperate -40 to 70°C Approvals Designed to comply MIL-STD-810F MIL-STD-1275-B MIL-STD-1275-B MIL-STD-1275-B MIL-STD-1275-B MIL-STD-461E CE	Interface	LVDS
Vertical Scan 50 - 70Hz Clock Rate 80MHz max Controls Brightness, OSD Touchscreen Resistive / RS422 Power Inputs DC Model 18 - 36V DC Power Consumption 30W (normal operation 15-20W) 50W to raise from -40°C Physical / Environmental Dimensions (approx) 380 x 320 x 50mm Weight (approx) 2.5kg Operating Temperature: -40 to 60°C Storage Temperate -40 to 70°C Approvals Designed to comply MIL-STD-810F MIL-STD-1275-B MIL-STD-1275-B MIL-STD-1275-B MIL-STD-461E CE	Multiscan Support	1024 x 768 XGA, 800 x 600 SVGA, 640 x 480 VGA
Clock Rate 80MHz max Controls Brightness, OSD Touchscreen Resistive / RS422 Power Inputs DC Model 18 - 36V DC Power Consumption 30W (normal operation 15-20W) 50W to raise from -40°C Physical / Environmental Dimensions (approx) 380 x 320 x 50mm Weight (approx) 2.5kg Operating Temperature: -40 to 60°C Storage Temperate -40 to 70°C Approvals Designed to comply MIL-STD-810F MIL-STD-1275-B MIL-STD-461E CE Part numbers	Horizontal Scan	31 - 60kHz
Controls Brightness, OSD Touchscreen Resistive / RS422 Power Inputs DC Model 18 - 36V DC Power Consumption 30W (normal operation 15-20W) 50W to raise from -40°C Physical / Environmental Dimensions (approx) 380 x 320 x 50mm Weight (approx) 2.5kg Operating Temperature: -40 to 60°C Storage Temperate -40 to 70°C Approvals Designed to comply MIL-STD-810F MIL-STD-1275-B MIL-STD-1275-B MIL-STD-1275-B MIL-STD-1275-B MIL-STD-1275-B MIL-STD-461E CE	Vertical Scan	50 - 70Hz
Touchscreen Resistive / RS422 Power Inputs DC Model 18 - 36V DC Power Consumption 30W (normal operation 15-20W) 50W to raise from -40°C Physical / Environmental Dimensions (approx) 380 x 320 x 50mm Weight (approx) 2.5kg Operating Temperature: -40 to 60°C Storage Temperate -40 to 70°C Approvals Designed to comply MIL-STD-810F MIL-STD-1275-B MIL-STD-1275-B MIL-STD-1275-B MIL-STD-461E CE	Clock Rate	80MHz max
Power Inputs DC Model 18 - 36V DC Power Consumption 30W (normal operation 15-20W) 50W to raise from -40°C Physical / Environmental Dimensions (approx) 380 x 320 x 50mm Weight (approx) 2.5kg Operating Temperature: -40 to 60°C Storage Temperate -40 to 70°C Approvals Designed to comply MIL-STD-810F MIL-STD-1275-B MIL-STD-1275-B MIL-STD-1275-B MIL-STD-461E CE	Controls	Brightness, OSD
DC Model 18 - 36V DC Power Consumption 30W (normal operation 15-20W) 50W to raise from -40°C Physical / Environmental Dimensions (approx) 380 x 320 x 50mm Weight (approx) 2.5kg Operating Temperature: -40 to 60°C Storage Temperate -40 to 70°C Approvals Designed to comply MIL-STD-810F MIL-STD-1275-B MIL-STD-1275-B MIL-STD-461E CE Part numbers	Touchscreen	Resistive / RS422
Power Consumption 30W (normal operation 15-20W) 50W to raise from -40°C Physical / Environmental Dimensions (approx) 380 x 320 x 50mm Weight (approx) 2.5kg Operating Temperature: -40 to 60°C Storage Temperate -40 to 70°C Approvals Designed to comply MIL-STD-810F MIL-STD-1275-B MIL-STD-1275-B MIL-STD-461E CE Part numbers	Power Inputs	
Physical / Environmental Dimensions (approx) 380 x 320 x 50mm Weight (approx) 2.5kg Operating Temperature: -40 to 60°C Storage Temperate -40 to 70°C Approvals Designed to comply MIL-STD-810F MIL-STD-1275-B MIL-STD-461E CE Part numbers	DC Model	18 - 36V DC
Dimensions (approx) 380 x 320 x 50mm Weight (approx) 2.5kg Operating Temperature: -40 to 60°C Storage Temperate -40 to 70°C Approvals Designed to comply MIL-STD-810F MIL-STD-1275-B MIL-STD-1275-B MIL-STD-461E CE Part numbers	Power Consumption	
Weight (approx) 2.5kg Operating Temperature: -40 to 60°C Storage Temperate -40 to 70°C Approvals Designed to comply MIL-STD-810F MIL-STD-1275-B MIL-STD-461E CE Part numbers	Physical / Environmental	
Operating Temperature: -40 to 60°C Storage Temperate -40 to 70°C Approvals Designed to comply MIL-STD-810F MIL-STD-1275-B MIL-STD-461E CE Part numbers	Dimensions (approx)	380 x 320 x 50mm
Storage Temperate -40 to 70°C Approvals Designed to comply MIL-STD-810F MIL-STD-1275-B MIL-STD-461E CE Part numbers	Weight (approx)	2.5kg
Approvals Designed to comply MIL-STD-810F MIL-STD-1275-B MIL-STD-461E CE Part numbers	Operating Temperature:	-40 to 60°C
Designed to comply MIL-STD-810F MIL-STD-1275-B MIL-STD-461E CE Part numbers	Storage Temperate	-40 to 70°C
MIL-STD-1275-B MIL-STD-461E CE Part numbers	Approvals	
	Designed to comply	MIL-STD-1275-B MIL-STD-461E
Model 29LMV124DR32MPT	Part numbers	
	Model	29LMV124DR32MPT

Specifications are subject to change without notice.

Monitors

Desktop Monitors Large screen Monitors Custom-made Monitors 19" Rack Mount Monitors Rear Mount Monitors Monitors for Panel Mount Monitors for VESA Mount Kiosks Accessories

• Monitors - Specific applications

Stainless Steel Monitors Car Displays Marine Monitors Military Monitors Replacement Monitors Train Monitors

• Panel PC's

High Performance Systems Custom made Panel PC's Low Power Systems Extreme environments

Pointing devices

Accessories
Touchpads
Trackballs
Trackball Modules
Joysticks
Custom made Pointing Devices

Keyboards

Desktop Keyboards with or without pointer Built-in Keyboards with or without pointer Cables & Connectors Custom made Keyboards



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Mulder-Hardenberg, est. 1927, is the answer to professional demands in the domain of electronic related environments. We don't just sell products. We use our multidiscipline knowledge to provide the best possible solution, designed to your specific interest.

Contactdetails:

The Netherlands Mulder-Hardenberg B.V. Westerhoutpark 1a 2012 JL Haarlem Tel.: +31 23 531 91 84 infonl@m-h.biz

Belgium, France, Luxemburg Mulder-Hardenberg N.V. Hoge Weg 129 B-2940 Stabroek Belgium Tel.: +32 3 660 13 20 infobe@m-h.biz

Germany Mulder-Hardenberg GmbH Nordring 13 D-65719 Hofheim/Ts Tel.: +49 6192 - 97 91 85 infode@m-h.biz