# Displays for Railway Applications



#### **High Quality, Level Crossing Monitor**

The 19LM081003 LCD head monitor has been designed as a surveillance monitor for Level Crossing applications. The Cube version works as a direct replacement for existing Monochrome CRT monitors. The Head and Desktop versions are suitable for control room upgrades in which the physical layout of control desks is being changed.

The monitors are suitable for interfacing with either colour or monochrome CCTV cameras. All configurations are constructed in a metal case with a protective, toughened glass front panel, finished in black. Power & Signal connectors enter at the rear. The BNC input has a 75R termination switch to enable slaving of signals to adjacent monitors.

#### **Features**

- Designed for Level Crossing surveillance
- Cube / Head / Desktop Versions
- For Colour PAL/NTSC CCTV cameras
- For Monochrome CCIR CCTV cameras
- Rugged Metal Case with Toughened Glass Protection Screen
- Optional Side Brackets for Console mounting

# 8.4" LCD Desktop Monitor 19LM081003



Specifications				
TFT Charateristics	Type Max. Resolution Active Display Area Display Protection Brightness Contrast Ratio Viewing angles (at CR>10) Backlight Life Nr. of colours	AM Colour TFT 800 x 600 pixels 170.4 x 127.8mm Tougnened Glass 350 cd/m² typical 320:1 typical 160°H / 125°V Dual Edge CFL x 2 16.8 million		
Video Signal	CCIR or PAL / NTSC standard			
Signal Sync	Composite (CVBS) 1Vp-p			
Synchronisation Range	Horizontal scan Vertical scan	15kHz (PAL) 50- 70Hz		
User Controls	Brightness, contrast & technician controls			
Set Up Controls	(Locked) Autosetup + full OSD menu via pushbuttons			
Connectors	Back of monitor			
Power supply / consumption	90 - 260V AC +/- 10% / 20W (Max)			
Environmental	Operating Temp Storage Temp	-20 to +55 °C -5 to +45 °C		
Dimensions	Monitor Weight	218 x 211 x 51.5mm (exc brackets / feet) 1.5kg approx		
Input Connector	BNC 75R			
Output Connecto	BNC with termination switch			
Housing	Painted aluminium			
Part numbers				
Model	19LM081003			

Specifications are subject to change without notice.

# PRONT VIEW 218.0 218.0 Active Area = 170.2X127.8mm Active Area = 170.2X127.8mm Picture Controls (With Lock-out) REAR VIEW Angle Adjuster Signal in / Out & Termination Switch.

#### 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



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

#### **High Quality, Level Crossing Monitor**

The 19LW081003 LCD head monitor has been designed as a surveillance monitor for Level Crossing applications. The Cube version works as a direct replacement for existing Monochrome CRT monitors. The Head and Desktop versions are suitable for control room upgrades in which the physical layout of control desks is being changed.

The monitors are suitable for interfacing with either colour or monochrome CCTV cameras. All configurations are constructed in a metal case with a protective, toughened glass front panel, finished in black. Power & Signal connectors enter at the rear. The BNC input has a 75R termination switch to enable slaving of signals to adjacent monitors.

#### **Features**

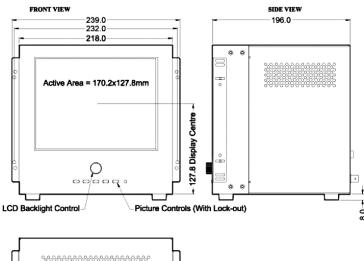
- Designed for Level Crossing surveillance
- Cube / Head / Desktop Versions
- For Colour PAL/NTSC CCTV cameras
- For Monochrome CCIR CCTV cameras
- Rugged Metal Case with Toughened Glass Protection Screen
- Optional Side Brackets for Console mounting

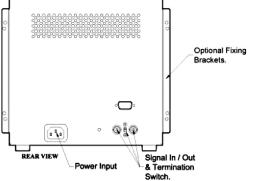
### 8.4" Cube Monitor 19LW081003



Specifications				
TFT Charateristics	Type Max. Resolution Active Display Area Display Protection Brightness Contrast Ratio Viewing angles (at CR>10) Backlight Life Nr. of colours	AM Colour TFT  800 x 600 pixels  170.4 x 127.8mm  Tougnened Glass  350 cd/m² typical  320:1 typical  160°H / 125°V  Dual Edge CFL x 2  16.8 million		
Video Signal	CCIR or PAL / NTSC standard			
Signal Sync	Composite (CVBS) 1Vp-p			
Synchronisation Range	Horizontal scan Vertical scan	15kHz (PAL) 50- 70Hz		
User Controls	Brightness, contrast & technician controls			
Set Up Controls	(Locked) Autosetup + full OSD menu via pushbuttons			
Connectors	Back of monitor			
Power supply / consumption	90 - 260V AC +/- 10% / 20W (Max)			
Environmental	Operating Temp Storage Temp	-20 to +55 °C -5 to +45 °C		
Dimensions	Monitor Weight	218 x 211 x 196mm (exc brackets / feet) 1.5kg approx		
Input Connector	BNC 75R			
Output Connecto	BNC with termination switch			
Housing	Painted aluminium			
Part numbers				
Model	19LW081003			

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



#### mulder-hardenberg

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

#### **High Quality, Level Crossing Monitor**

The 29LM081003 LCD head monitor has been designed as a surveillance monitor for Level Crossing applications. The Cube version works as a direct replacement for existing Monochrome CRT monitors. The Head and Desktop versions are suitable for control room upgrades in which the physical layout of control desks is being changed.

The monitors are suitable for interfacing with either colour or monochrome CCTV cameras. All configurations are constructed in a metal case with a protective, toughened glass front panel, finished in black. Power & Signal connectors enter at the rear. The BNC input has a 75R termination switch to enable slaving of signals to adjacent monitors.

#### **Features**

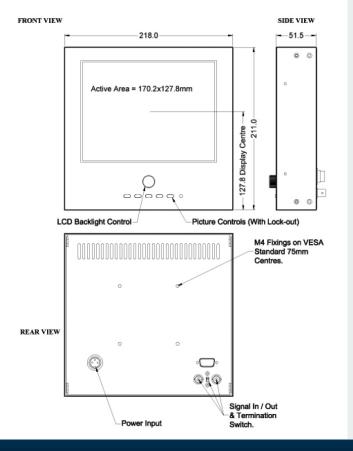
- Designed for Level Crossing surveillance
- Cube / Head / Desktop Versions
- For Colour PAL/NTSC CCTV cameras
- For Monochrome CCIR CCTV cameras
- Rugged Metal Case with Toughened Glass Protection
   Screen
- Optional Side Brackets for Console mounting

# 8.4" Head Monitor 29LM081003



Specifications				
TFT Charateristics	Type Max. Resolution Active Display Area Brightness Contrast Ratio Response Time Viewing angles (at CR>10) Backlight Life Nr. of colours	AM Colour TFT 800 x 600 pixels 170.4 x 127.8mm 350 cd/m² typical 320:1 typical 15ms average, typical 160°H / 125°V Dual Edge CFL x 2 16.8 million		
Video Signal	CCIR or PAL / NTSC standard			
Signal Sync	Composite (CVBS) 1Vp-p			
Synchronisation Range	Horizontal scan Vertical scan	15kHz (PAL) 50- 70Hz		
User Controls	Brightness, contrast & technician controls			
Set Up Controls	(Locked) Autosetup + full OSD menu via pushbuttons			
Connectors	Back of monitor			
Power supply / consumption	90 - 260V AC +/- 10% / 20W (Max)			
Environmental	Operating Temp Storage Temp	-20 to +55 °C -5 to +60 °C		
Dimensions	Monitor Weight	218 x 211 x 51.5mm (exc brackets / feet) 1.5kg approx		
Input Connector	BNC 75R			
Output Connecto	BNC with termination switch			
Housing	Painted aluminium			
Part numbers				
Model	29LM081003			

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



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