

**High Quality, Slow Scan Legacy System Replacement**

The 29LM1901E51UN/3 series of Industrial LCD monitors have been designed as replacements for 19" CRT monitors now that supplies of 19" CRTs are difficult to obtain. Ease of integration into a wide range of Measurement, Instrumentation and Human-Machine interface applications has been a key consideration.

KME has designed a rugged LCD monitor module, of minimum width, to match the dimensions of its 19" CRT monitor chassis. The monitor is housed in a rugged metal case with rear fixing points. The LCD module is ventilated for best reliability when mounted within the OEM enclosure. EMC considerations include the use of a metal shield over the front of the LCD panel. Toughened, non-glare safety glass protects the LCD.

The A/D board has been designed to accept a wide range of signal timings from 15kHz up to SVGA standard, including CGA & EGA legacy signals. 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**

- CGA/EGA/VGA/SVGA compatible
- Analogue Video inputs via BNC/15HD
- TTL Inputs via 9D- 15D Accessory Cable
- Programmable for non-standard Legacy signals
- Rear OSD Controls for maximum versatility
- Optional Touchscreen Integration

Slow Scan Support - examples

H. kHz	V. Hz	Pixels	H. kHz	V. Hz	Pixels
15.625	50	714 * 288	15.63	50	560 * 275
15.63	60	808 * 238	15.72	60	564 * 240
15.72	60	508 * 240	15.72	60	604 * 240
15.72	60	640 * 200	16.10	50	564 * 304
16.276	70	640 * 220	16.79	70	577 * 215
17.85	50	508 * 338	21.83	60	640 * 350
20.65	50	640 * 384	24.78	60	640 * 384

*19" Slow Scan  
LCD Head Monitor  
29LM1901E51UN-3*



Specifications: see next page

Specifications		
TFT Characteristics	Type Max. Resolution Active Display Area Response Time Contrast Ratio Brightness Viewing angles (at CR>10) Backlight life Nr. of colours Clock Rate	AM Colour TFT 1280 x 1024 pixels 376 x 301 mm 10ms average, typical 1000:1 typical 250 cd/m <sup>2</sup> typical 178° H, 178° V 50,000 hrs typical 16 million 150MHz
Video Signal	Analog RGB 0.7-1.0Vp-p	Or TTL >2.75Vp-p
Signal Sync	Separate H & V (+/ve) TTL	or Composite (-ve) TTL or Sync- on - Green (-ve) 0.3V
Synchronisation Range	Horizontal scan Vertical scan	15 - 91kHz 40 - 80Hz
Display Modes	VESA Support	640 x 480 VGA 800 x 600 SVGA 1024 x 768 XGA 1280 x 1024 SXGA (recommended)
Slow Scan Support	Pre-programmed Analog or TTL inputs in 15-40kHz range (See table examples on previous page)	
Power supply	12VDC	
Power consumption	50W (Max)	
Environmental	Storage temp. Operating temp.	-20 to 60°C 0 to 50°C
Weight	9 kg approx	
Input	9D, 15D, BNC x 5	
Housing	Painted aluminium	
User controls	Front mounted	
On screen buttons	Brightness, Contrast, Auto set-up Disable, H/V Position, Clock, Clock Phase and Priority	
Part numbers		
Model	29LM1901E51UN/3	

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.

### Contact details:

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