

High Performance **High Fidelity** High Reliability

### The Display Engineers



19.6" AMLCD

### Product Description

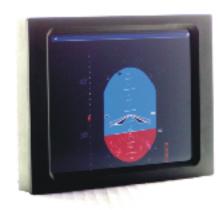
PDT's rugged AMLCD displays are high-performance color active matrix liquid crystal displays for avionics simulation applications and were developed specifically for use in prototype JSF simulator cockpits. RS170type video interface can be sync-on-green or separate/composite video sync. These displays feature:

- § Complete remote adjustment, calibration and diagnostics using a standard PC.
- § High-brightness, wide dimming range backlights creating a display capable of being viewed under direct sunlight conditions down to NVG requirements.
- § A wide variety of functional controls and form-factors can be specified as dictated by actual flight displays.
- § Built for durability and low life-span cost in simulator applications only, including full motion platforms. Cannot be used in aircraft.

# **Ruggedized** Flat Panels



F-35 JSF



12.1" AMLCD

Precision Display Technologies § 4635 Longley Lane, Building 109, Reno, NV 89502 Phone (775) 825-4488 § Fax (775) 825-4489 § www.pdt-usa.com § CAGE Code 1KMZ5



High Performance **High Fidelity** High Reliability

## The Display Engineers

# **Ruggedized AMLCDs**

### **Performance Specifications**

from 512 x 512 to 1600 x 1200

Total lines per frame: 537 Total pixels per line: 640 Active lines per frame: 512 Active pixels per line: 512 Frames per second: 60

Fields per frame:

20.6208 MHz, 48.4947 nsec Pixel clock:

Line -

Length: els, 31.0366 msec 32.22 KHz, 31.0366 msec Frequency: Horizontal Sync: 64 pix els, 3.10366 msec Horizontal Back porch: 56 pix els, 2.7157 msec Horizontal Active: 512 pix els, 24.8293 msec Horizontal Front porch: 7.99999 pix els, 387.957 nsec

Field -

Temperature:

343680 pix els, 537 lines, **Duration**: 16.6667 msec

Vertical Sync: 1920 pix els, 3 lines, 93.1099 msec els, 3.1 lines,

Vertical Sync Pulse: 1984 pix 96.2135 msec

Vertical Back Porch: 121160 pix

589.696 msec els, 512 lines,

Vertical Active: 327680 pix 15.8908 msec

Vertical Front porch: 1920 pix els, 3 lines, 93.1099 msec

**Operating Specifications** 

Power Requirement: 28 VDC, 112 w atts maximum

consumption, 50 w ° to 40° C operating, -20° to 70°

C non-oper ating 0 to 10,000 ft oper Altitude: ating, 0 to

40,000 ft non-oper ating

Relative Humidity: up to 90% (non-condensing)

ating, up to 95% (non-con-

densing) non-oper

### **Mechanical Specifications**

Enclosure Height: From 4" Enclosure Width: Enclosure Depth:

Enclosure Material: Black anodiz ed aluminum Cooling: orced air, intake fan, rear vents

I/O: Video - R. G. B (75 Ohm BNC) ontal/Vertical Sync - (75 Ohm

Horiz BNC)

Dim Control I/O: 9-pin Male DB9

Display Control I/O: 9-pin F emale DB9 Bezel Control I/O: 37-pin Male DB37 CPC 4-pin, Male

### Remote Adjustments

- Luminance limits

#### Warranty

These units are offered with the standard Precision Display Technologies (PDT) warranty of one (1) year on parts and labor for design and/or manufacturing defects in PDT supplied components only (original manufacturers' warranties apply to all CRTs, HUD optics, AMLCDs and bezels). Warranty specifically does not include customer-induced failures or damage caused by shippers.



Precision Display Technologies § 4635 Longley Lane, Building 109, Reno, NV 89502 Phone (775) 825-4488 § Fax (775) 825-4489 § www.pdt-usa.com § CAGE Code 1KMZ5