

INTELLIGENT DISPLAY SERIES

Designed to meet the needs of deployed military applications



Long Life Cycle

Mil Specs

AC or DC Power

Third Generation Intelligent Electronics

Multiple Input: Scale, Position, Blend

Real Time Enhanced Video Option

Touch Panel Option

Wide Aspect Ratio

The thin, lightweight ID Series panels are available in 24", 21.3", and 17" sizes. Each display can be VESA arm mounted, panel mounted, rack mounted, or attached to a specifically designed multi-display mounting frame.

Under the hood of each ID Series panel is Z Microsystems' third generation intelligent video processing engine. This video engine offers a number of impressive real-time image improving functions designed to enhance streaming video or still images. The ID Series also offers "SMARTtracker" on-board diagnostic system that continuously monitors the display's performance to provide early warning of potential faults or developing defects. All parameters can be set and quickly recalled to personal users preferences.

The ID Series system is meticulously engineered to give real-time ergonomic comfort with "lock-down" details for transportation and quick-display-release locks for rapid panel replacement.

Together with built-in real-time video enhancement and flexible mounting—all in rugged lightweight packaging—make the ID Series a "must-have" display solution for long-term fielded military applications.

Choices in LCD's

Solve the End-Of-Life Problem

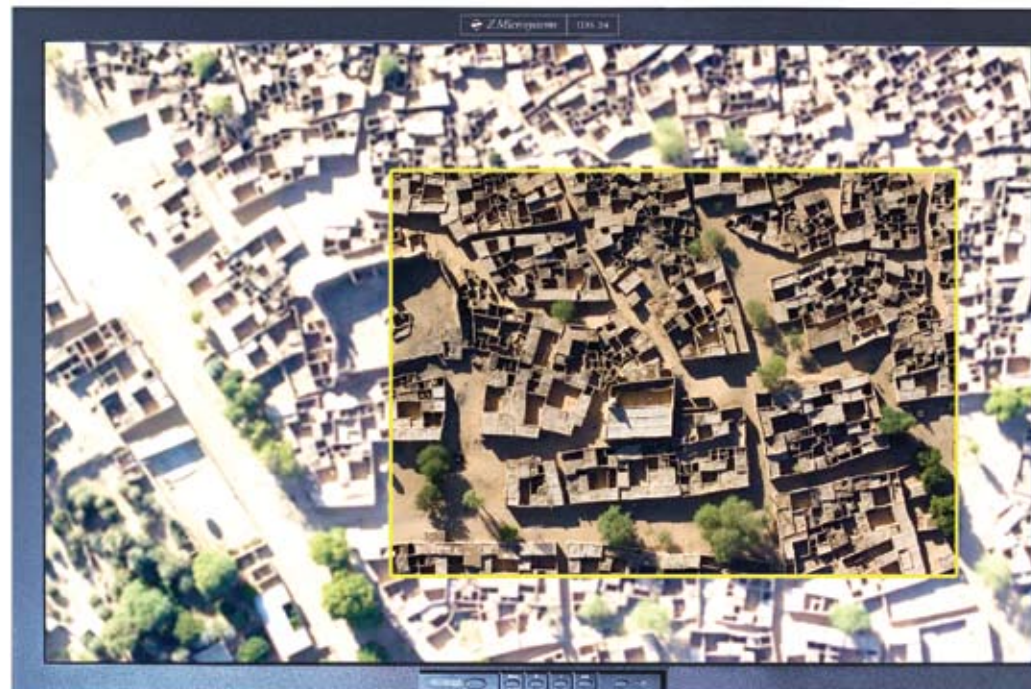
Third generation electronics and choices in frame assemblies enable seamless integration of new LCD panels. No more vanishing vendor problems.

Mission Ready

Designed for Military Environments: Shock, Vibration, EMI, Temperature, Humidity qualified to MIL-SPECS.



Real Time Enhancement Options



Choices in Rack Mountings

Single Rack Mount



Hinged Pair



Triple Play



Highlights

- 17", 21", & 24" active display area
- Resolution up to 1920 x 1200 pixels for 24", up to 1600 x 1200 pixels for 21", and up to 1280 x 1024 pixels for 17"
- Digital and analog video support
- USB Host Communications link
- Real-time enhanced video
- Soft Menu user-friendly on-screen GUIs
- Tough protective AR shield
- Standard optically bonded AR shield
- Optional optically bonded touch panel
- SMARTtracker logistics, prognostics, and environmental network tracking
- Rugged lightweight packaging
- Able to mount multiple displays
- Viewing angles are fully adjustable per 5th - 95th percentile MIL-STD ergonomics specifications
- Optional Quick-release mounting
- Applications include shipboard, airborne, & ground vehicles & ground control stations

Open Architecture Support for Third Party Algorithms

Available Today

- Real Time Enhanced Video
- Edges and Contours

In Development by Third Parties

- Adaptive temporal noise reduction
- Locally adaptive contrast enhancement
- De-hazing
- De-blurring
- De-warping
- Motion imagery stabilization

- Rolling shutter mitigation
- Structure from motion
- Image registration
- 3-D resolution enhancement
- Change and motion detection



Specifications

IDS Specifications

Display Size	24 Inch	21 Inch	17 Inch
Pixels	1920 x 1200	1600 x 1200	1280 x 1024
Aspect Ratio	16:10	4:3	5:4
Colors	16.7 Million		
Control	Front panel buttons or GUI via USB		
Options	Second controller for quad view, touch panel with programmable virtual buttons, VESA mount or rack mount, quick disconnect		

Power

Power Consumption	101 W	66 W	44 W
AC Power Supply	100-240 VAC, .88 A, 50/60 Hz, 400 Hz	100-240 VAC, .57 A, 50/60 Hz, 400 Hz	100-240 VAC, .38 A, 50/60 Hz, 400 Hz

Interface

Standard	2 x DVI-D + 2 x HD15 + 1 USB, 2 x DVI-I + 1 USB, or 2 x DVI-D + 2 x H015 + 1 USB		
Touch Option	2 x DVI-I + 1 USB		

Physical

Total Packaging Size	14.36" H x 22.01" W x 2.79" D	14.2" H x 18.45" W x 2.29" D	12.02" H x 14.68" W x 2.17" D
Total Weight	19.35 lbs.	18.4 lbs.	11 lbs.

Environmental

Operating Temp	0° to 40° C		
Non-Op Temp	-20° to +60° C		
Humidity	Up to 85% Non-Condensing		
Operating Altitude	Up to 10,000 ft.		
Non-Op Altitude	Up to 40,000 ft.		
Operating Vibration	MIL-STD-810F, figure 514.5C-6, table 514.5C-VIII, C-17 Aircraft		
Operating Shock	MIL-STD 810F, 10 g's		
Fungus	Non-Nutrients/Contaminants		

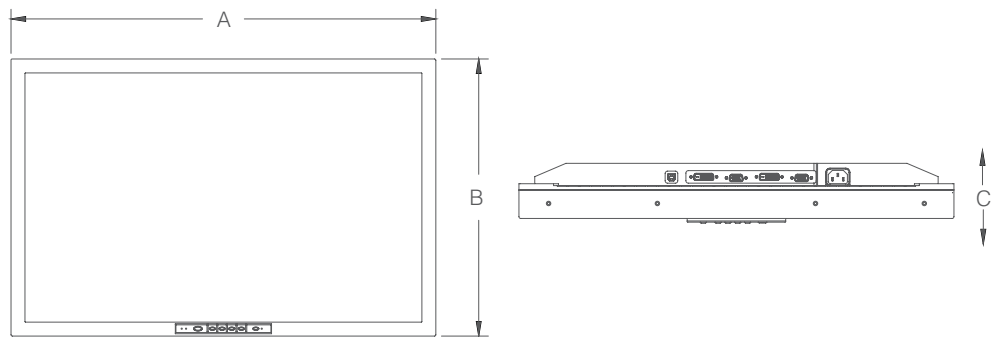
Reliability

MTBF	Min 30,000 hrs.	Min 30,000 hrs.	Min 40,000 hrs.
MTTR	<30 minutes		
Safety	UL 60950 (used as a design guideline)		
ESD	IEC 61000-4-2 8kv contact, 15kv air		
EMC/RFI	MIL-STD-461E RE101-1 Army limits, RE102-3 Aircraft>25m RS101-2 Army levels, RS101 Ground Systems, Air Force		
Quality/Workmanship	IPC/ISO 9001:2008 and applicable section of MIL-HDBK-454		



Form Factors

Dimension	24"	21"	17"
A – Width	22.01	18.45	14.68
B – Height	14.36	14.20	12.02
C – Depth	2.79	2.29	2.17



Vesa or Rack Mounting

