

# ORION 21.3L

## ULTRA RUGGED DISPLAY

Ultra-Rugged, Led Display Platform  
For Extreme Environments



zmicro.com

### Next Generation Design

ZMicro is proud to introduce the next generation of our Orion Series, the Orion 21.3L. MIL-Tailored and engineered for advanced EMI protection, as well as durability in extreme environments, the Orion 21.3L is equipped with a new 1600 x 1200 native resolution LED backlit LCD panel, front panel user controls, and a durable front panel hard power switch.

### Flexible Viewing Options

The Orion 21.3L operates on ZMicro's high-performance 3rd generation video controller, providing a highly reliable viewing solution with a number of advanced capabilities. The Orion 21.3L supports Picture-In-Picture (PIP) viewing, Quad-View (optional), Dual-View and other user-adjustable viewing settings. It is also capable of hosting ZMicro's Real-Time Enhanced Video (RTEV), an embedded algorithm enhancement technology that improves video and imagery degraded by poor environmental conditions, all without adding latency.

### Rugged MIL-Tailored Displays

The Orion 21.3L is manufactured from lightweight aircraft grade aluminum and finished with a durable baked on powder coating. Built on the foundations of our highly reliable and robust Orion Series, the Orion 21.3L meets MIL-STD-810G Shock, MIL-STD-901D Grade A, D0-160 Section 8 Vibration, and MIL-STD-461F EMI Protection. Demanding environments demand mission-ready solutions like the Orion 21.3L UDP.

Ideal for Airborne, Shipboard,  
& ISR Applications

### Don't miss a thing with RTEV!

(Actual enhancement images; no manipulation has been performed.)



Fog



Sand

### HIGHLIGHTS

- 21.3" active viewing area
- 1600 x 1200 (UXGA) native resolution
- Scaled resolution support up to 1920 x 1200
- LED Backlight
- MIL-STD-901D GRADE A, MIL-STD-810G, MIL-STD-461F
- Robust machined aluminum construction
- 19" RETMA rack-mount adapter
- Digital and analog video signal support
- User-friendly on-screen display (OSD) menus
- Touch panel options available
- EMI MicroMesh option
- Real-Time Enhanced Video (RTEV) capable

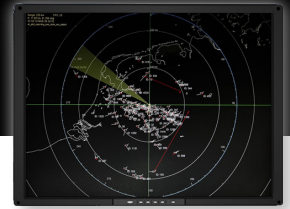
### FOR MORE INFO

Contact us at [sales@zmicro.com](mailto:sales@zmicro.com)  
or call 858.831.7000.

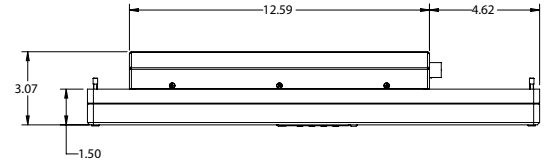
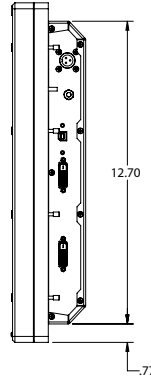
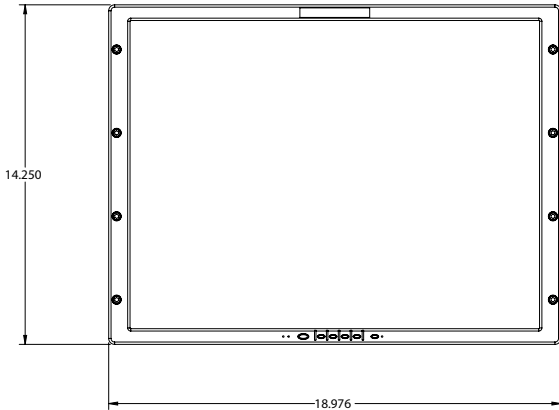
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To see all of our display options, visit [zmicro.com/displays](http://zmicro.com/displays).



## SCHEMATICS



## TECHNICAL SPECIFICATIONS

SIZE & WEIGHT	Dimensions	14.25 H x 18.98 W x 3.07 D inch / 362 H x 482 W x 78 D mm
	Weight	17.5 lbs. / 7.9 kg
POWER	Power Supply	110-240VAC, 2.0A input @ 50-60Hz
	Power Consumption	72 W
SPECIFICS	Panel Size	21.3" active viewing area
	Native Resolution	1600 x 1200 (UXGA) (Scaled support up to 1920 x 1200)
	Backlight	LED
	Brightness	285 cd/m2 (Micromesh or touch options will reduce panel brightness)
	Contrast Ratio	2000:1
	Color Palette	16.7 Million
	Viewing Angle	Full +/- 88°
	Controls	INPUT, MENU/SELECT, -, +, EXIT, STANDBY, USB Communications, (Custom menu options available)
	Panel Options	EMI MicroMesh, Embedded Real Time Enhanced Video (RTEV), Quad-View
	Scaling Modes	No Scale, Fullscreen Scaled, SAR (Scaled w/ Aspect Ratio retained)
	Connectors	MIL-DTL-5015 locking connector, DVI-I, HD-15, USB Type-B
	Mounting	Custom, 19" RETMA rack compatible with adapter plate
ENVIRONMENTAL	Operating Temperature	0° to 50° C (Extended operating temperature options available)
	Storage Temperature	-40° to +70° C
	Humidity	5% to 95% Non-condensing @ 40° C for 48 hours
	Operating Altitude	Up to 15,000 ft.
	Non-operating Altitude	Up to 40,000 ft.
	Vibration	D0-160, Section 8, Curve B
	Shock	MIL-STD-810G, 20gs, MIL-STD-901D, Grade A
	EMI / EMC	MIL-STD-461F, RE102 (Aircraft > 25m, passed), RS103, CE102 (passed), CS101, CS114, CS115, CS116
	MTTR	< 30 mins.
	Crash Safety	9gs all directions
	Settling Dust	MIL-STD-810G, Method 510.4, Procedure III
OTHER	Quality	IPC/ISO 9001:2008 and applicable sections of the MIL-HDBK-454

ZMicro, Inc. is an ISO 9001:2008 certified company and compliant with AS 9100 requirements. Product information and technical data provided are typical of standard configurations of the described products. Measured results may vary slightly between units. This information is subject to change without notice. For more information, or the latest version of this product sheet, please visit our website @ [www.zmicro.com](http://www.zmicro.com)