

# ORION 32L

## 4K RUGGED DISPLAY

Widescreen Rugged 4K Display  
with Low Profile Folding Handles



### 4K Resolution

ZMicro's leading technology provides the industry's most advanced 4K resolution support. The Orion 32L offers an unparalleled viewing experience with Ultra HD (3840x2160) resolution with a full 60Hz refresh rate. The rugged display incorporates a DisplayPort 1.2 input together with convenient Single Stream Transport (SST) for a natural and continuous viewing experience from a single source.

### Real-Time Image Processing

The Orion 32L is designed around an extensible electrical architecture to enable rapid customization and maximum user flexibility. The display offers modular video input cards to support a host of video input formats including DVI, DisplayPort 1.2, and Video over IP (H.264 decoding). Users are able to simultaneously view up to four video sources via picture-in-picture (PiP) technology with independent PiP control of size, position and other adjustability.

### Advanced Video Outputs

The Orion 32L utilizes ZMicro's 4th Generation Video Controller to support real-time video processing capabilities. Powered by advanced FPGA technology, ZMicro's controller can support sophisticated video processing algorithms with virtually no added latency. The Orion 32L supports image stabilization, enhancement, edge detection and more. Users can even output their display content via H.264 encoding and distribution for archiving, forensic analysis and post mission review.

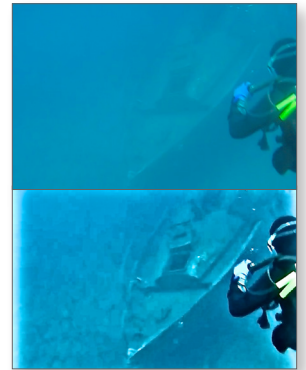
Ideal for Airborne, Shipboard, &  
Ground Vehicle Environments

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

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



Fog



Underwater

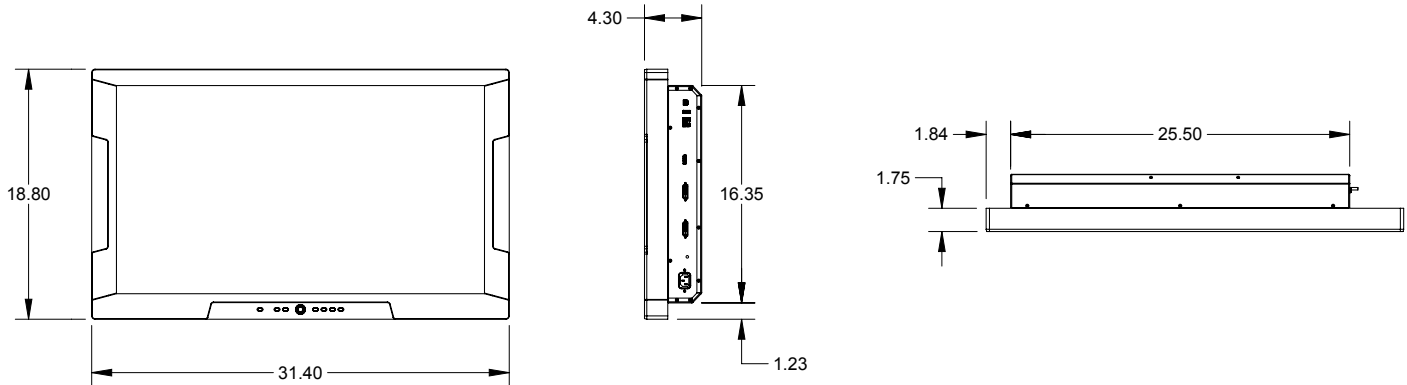
### HIGHLIGHTS

- 32" rugged display platform
- Ultra HD 3840 x 2160 resolution
- Native 4K input @60 Hz
- Integrated Real-Time Enhanced Video Capability
- Consolidate multiple H.264 1080P inputs onto one screen with no scaling
- Consolidate multiple legacy video inputs onto a common screen.
- 4th Generation video controller
- User-friendly on-screen display (OSD) menus
- Robust machined aluminum construction

### FOR MORE INFO

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

## SCHEMATICS



## TECHNICAL SPECIFICATIONS

<b>SIZE &amp; WEIGHT</b>	Dimensions	18.8" H x 31" W x 5.1" D
	Weight	43 lbs. / 19 kg
<b>POWER</b>	Power Supply	100-240Vac, 4.0-2.0A, 50-60Hz, 320W Max
	Power Consumption	150W
<b>SPECIFICS</b>	Panel Size	31.5" active display area
	Native Resolution	3840 x 2160
	Backlight	LED
	Brightness	Native Panel Typical 450nits. (Micromesh or touch options will reduce panel brightness.)
	Contrast Ratio	1000:1
	Color Palette	1.0783 Billion
	Viewing Angle	For CR>10; 88°Horizontal & Vertical
	Picture-In-Picture	Multiple PIP Options available
	Panel Options	AR Bonded
	Scaling Modes	No Scale, Fullscreen Scaled, SAR (Scaled w/ Aspect Ratio retained)
	Connectors	Display Port 1.2 (HBR2 4 Lane), DVI-I x2, USB Type-A, USB Type-B, Gigabit Ethernet, Front Panel Mini USB Type-B
	Mounting	Custom, 19" RETMA rack compatible
<b>ENVIRONMENTAL</b>	Operating Temperature	0° to 50° C
	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\5,000 ft.
	Vibration	Standard Random Vibration, Section 8, Curve B or B2, 4-25Hz, 1.27gs Sine
	Shock	40gs 11ms, terminal Saw-tooth
	EMI / EMC	Radiated: RE101 (Army Limits), RS101, RS103 up to 60V/m, RE102 (Shipboard limits)
	MTBF	50,000 hrs (LED lifetime for panel)

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)