ORION 32
4K RUGGED DISPLAY

32" Widescreen Rugged 4K Display
w/Real-Time Video Processing

zmicro.com

4K Resolution

ZMicro's leading technology provides the industry's most advanced 4K resolution support. The Orion 32 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 32 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 HDMI. Users are able to simultaneously view up to four video sources via Virtual Window technology with independent control of size, position and other adjustability.

Advanced Video Outputs

The Orion 32 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 32 supports image stabilization, enhancement, edge detection and more.

Whether your rugged display requires real-time video processing or unique video signals and inputs, our powerful and proprietary 4K video controller supports rapid customization to meet any military program need.

HIGHLIGHTS

- 32" rugged display platform
- Ultra HD 3840 x 2160 resolution
- Native 4K input @60 Hz
- Integrated Real-Time Enhanced Video Capability
- Consolidate multiple video inputs onto a common screen.
- 4th Generation video controller
- User-friendly on-screen menu system (OSM)
- Robust machined aluminum construction
- API support for remote user control
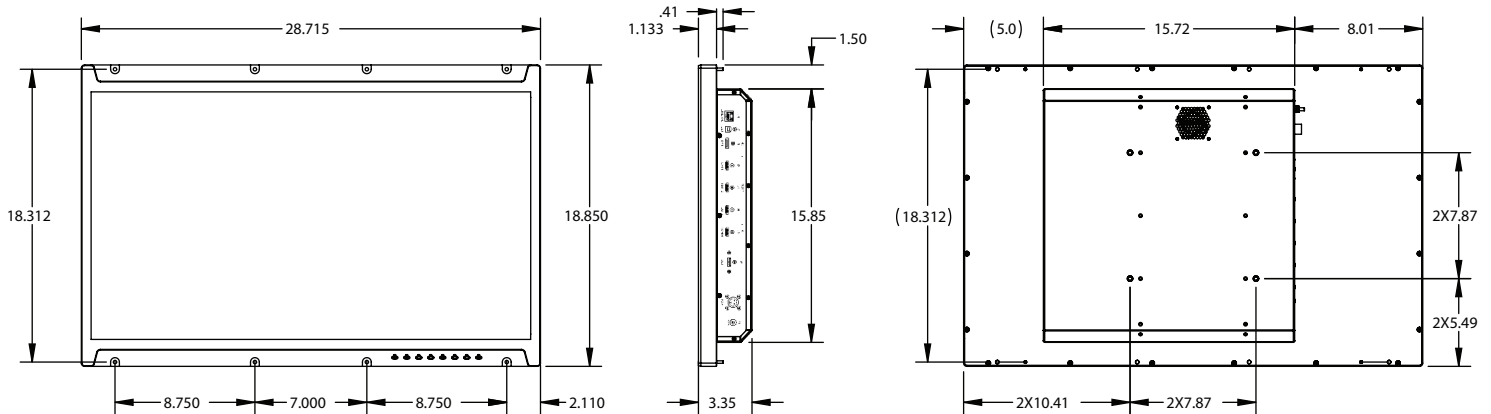- 19" RETMA rack compatible (portrait orientation) or VESA compatible (200x200)

Ideal for Airborne, Shipboard, & Ground Vehicle Environments

FOR MORE INFO

Contact us at sales@zmicro.com
or call 858.831.7000.

zmicro | RUGGED COMPUTING SOLUTIONS

zmicro.com

MECHANICAL OUTLINE

TECHNICAL SPECIFICATIONS

SIZE & WEIGHT	Dimensions	18.85"H x 28.72"W x 3.35"D
	Weight	30 lbs.
POWER	Power Supply	100-240 VAC, 50-60Hz, 325W Max
	Power Consumption	90W
SPECIFICS	Panel Size	31.5" active display area
	Native Resolution	3840 x 2160
	Backlight	LED
	Brightness	350 cd/m² (may vary with optical stack)
	Contrast Ratio	1300:1
	Aspect Ratio	16:9
	Color Palette	1.07 Billion colors, 10 Bit (8Bit + A-FRC)
	Controls	Front accessible OMS button controls
	Viewing Angle	For CR>10; 89° Horizontal & Vertical
	Virtual Window	Multiple input options available
	Panel Options	Optically bonded AR / AG / EMI shield options
	Scaling Modes	No Scale, Fullscreen Scaled, SAR (Scaled w/ Aspect Ratio retained)
	Mounting	19" RETMA rack compatible (portrait orientation) VESA compatible (200x200)
	Connectors	MIL-STD-5015 AC power input with locking connector, Display Port 1.2, HDMI 2.0, USB Type-A, USB Type-B, Ethernet Port
ENVIRONMENTAL	Operating Temperature	0° to 50° C
	Storage Temperature	-40° to +70° C
	Operating Altitude	Up to 10,000 ft.
	Non-operating Altitude	Up to 40,000 ft.
	Humidity	5% to 95% Non-condensing @ 40° C for 48 hours
	Vibration	DO-160G: Section 8.0 - Category S - Curve C
	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)
	MTTR	< 30 mins.
	ESD Safety	IEC 61000-4-2 8kv contact, 15kv air
OTHER	Quality	IPC/ISO 9001:2015 and applicable sections of the MIL-HDBK-454