ZX1

SHIPBOARD SERVER

Robust 1U rackmount server for high shock, high humidity environments.

Rugged, Naval Performance

The ZX1 shipboard server was designed specifically for Naval applications. The ZX1 shipboard server is engineered for an impressively high MTBF rating. The new server architecture optimizes the selection of active components to yield best-in-class MTBF. Each internal component is coated to support continued operation in high humidity environments. Leading design insures the ZX1 Shipboard server withstands high-impact shock events and meets MIL-STD-901E shock levels. An integrated common access card (CAC) reader provides added security with limited user control.

Low Profile, 1U Computing Solution

The ZX1 shipboard server packs high performance multi-core processing into an ultra-low profile 1.72" rack space. With 1 PCIe add-on expansion slot the 1U server can support RAID, x16 graphics, or other technologies for specific workstation requirements. The ZX1 also supports up to 2 removable TP2 drives for maximum storage capacity. The ZX1 is the ideal powerhouse workstation for optimizing rack space and performance.

Mission Ready Server

ZMicro employs over 30 years of experience in ruggedizing COTS components to operate reliably at peak performance in harsh environments. ZX Servers meet stringent MIL-STD shock/vibe requirements by utilizing features such as: support brackets to secure PCI expansion cards in all three axes, a reinforced aluminum chassis, locking connectors and RTV to secure all non-locking connectors. ZX Servers are also designed to mitigate electrical interference by using input filters and cable shielding. ZMicro takes reliability seriously and performance seriously to ensure your server will remain running in the harshest environments.

Ideal for Shipboard Applications

HIGHLIGHTS

- 1U rugged rackmount server, 24" depth
- Supports the latest Intel® multi-core processors
- Latest NVIDIA® and ATI® graphics cards
- Lightweight, all aluminum enclosure
- Dual-redundant 650W AC power supply
- Up to 2 TP2 storage modules - 7.68TB ea.
- Convenient front panel system status display
- Field Replaceable CAC Reader
- Slim DVD-RW and front accessible USB ports
- Up to 1 PCI expansion slots
- 4 Onboard Gigabit Ethernet ports
- RAID configurable data storage
- Internal temperature monitoring & adaptive cooling
- Rugged design and verification to stringent MIL Standards
- High reliability - MTBF min. 34,000 hours

Capable of surviving the Navy's most stringent shock test, MIL-STD-901E Grade A, Class I and MIL-STD-167 Type I for vibration.

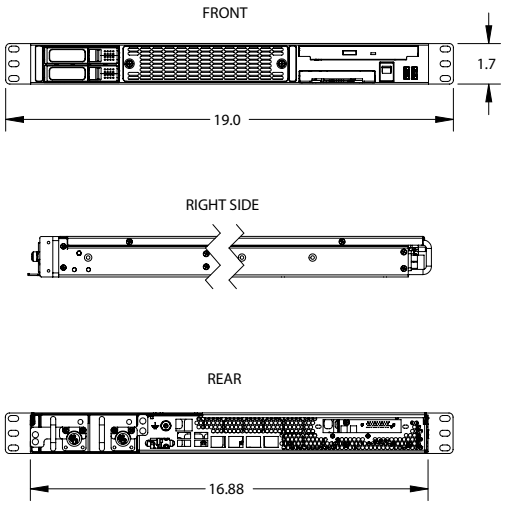
FOR MORE INFO

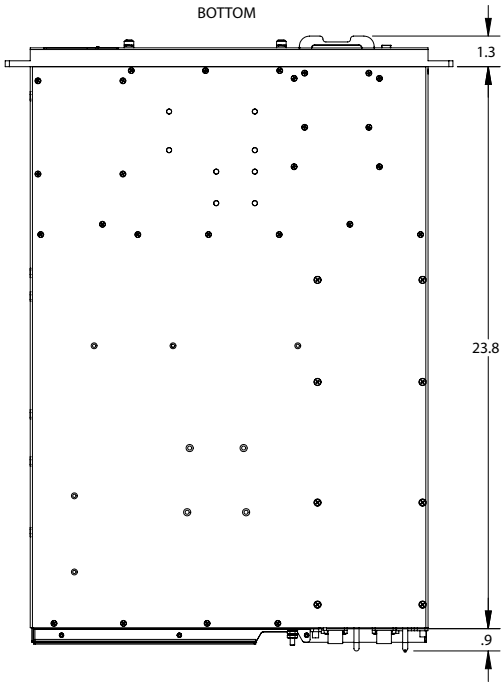
Contact us at sales@zmicro.com
or call 858.831.7000.

ZX1 | SHIPBOARD SERVER

To see all of our server options, visit zmicro.com/servers

MECHANICAL OUTLINE





TECHNICAL SPECIFICATIONS

SIZE & WEIGHT	Dimensions	1.72”H x 16.88”W x 23.80”D
	Weight	22lbs.
	TranzPak 2 Weight	7 - 10 oz.
POWER	Power Supply	650W Max Supply, dual-redundant or 1300W max load sharing, MIL-DTL-5015
	Input Range	90-264 VAC (Input Frequency 47-63Hz)
OPTIONS	Motherboard	Latest Intel® based motherboards
	Processor	Latest Intel® CPUs
	Memory	Up to 128GB DDR4 2666MHz Unbuffered ECC Memory
	Storage	Up to 2 TranzPak 2 rugged storage modules (Standard 2.5” drives - 7.68TB each SSD/HDD)
	Graphics	Latest NVIDIA® & ATI™ graphics video cards
	PCI Add-On Slots	1 PCIe slot
ENVIRONMENTAL*	Operating Temp High	50°C, MIL-STD-810G, Method 501.5, Procedure I
	Operating Temp Low	0°C, MIL-STD-810G, Method 502.5, Procedure I
	Non-Operating Temp High	70°C, MIL-STD-810G, Method 501.5, Procedure II
	Non-Operating Temp Low	-40°C, MIL-STD-810G, Method 502.5, Procedure II
	Operating Altitude	Up to 15,000 ft., MIL-STD-810G, Method 500.5
	Non-Operating Altitude	Up to 45,000 ft., MIL-STD-810G, Method 500.5
	Humidity	MIL-STD-810G, Method 507.5, Procedure Ib (Natural Cycle B3)
	Shock	MIL-STD-810G, Method 516.6, 30 g’s, Saw-tooth, 11ms & MIL-DTL-901E, Grade A, Class II; Type B
	Vibration	MIL-STD-167, Type I, Deck Mounted Equipment
	EMI/EMC	MIL-STD-461F, RE101, RE102 (Shipboard Level 1), RS103, CE101, CE102, CS101, CS114, CS116
OTHER	Quality	AS9100:2016 and ISO 9001:2015 certified
	MTBF	Min. 34,000 hrs.
	Expected Operating Life	10 years
	Maintainability	<20 minutes at Line-Replaceable Unit (LRU) Level
	ECCN	4A994
	ESD:	4KV Contact, 8KV Air
	Airborne Noise:	MIL-STD-1774E, Appendix E, Grade A-3

** ZMicro’s products are designed to meet or exceed environmental specifications. Test results are configuration dependent. For specific test results, please contact your sales representative.*