



ZX1 STATION

ULTRA RUGGED RACK MOUNTED 1U WORKSTATIONS + SERVERS

The ZX1 Station is a low-profile, rack mountable, computing and graphics processing powerhouse. At only 1.72" (1U) high by 20 inches deep, this compact, lightweight, rugged workstation gives back valuable rack space and delivers an extremely flexible and high-performance solution that is unbeatable in mission-ready applications.

The ZX1 Station integrates the latest computing technology with a system architecture supporting any Extended ATX form-factor motherboards with support for up to three rugged hot-pluggable TP2 removable drives, a slimline DVD-RW, and an environmental control board to support proper thermal regulation. User-friendly features include a front accessible power switch, two front accessible USB ports for rapid connectivity, and a quick release top access cover for ease of service and hardware installation.

HIGHLIGHTS

- Supports latest Intel Quad Core Xeon & AMD Quad Core Opteron processors
- 650W dual redundant power supply
- 19" rack mountable
- Only 20 inches deep
- Slim 1U (1.70") height
- 2 PCI expansion slots
- Ultra-secure PCI card brackets
- Lightweight rugged packaging
- Up to 3 rugged removable SATA or SAS TranzPak2 HDDs
- Slim DVD-RW and front accessible USB slots
- Environmental control board with status display

Optimized for rugged conditions, the ZX1 hosts innovative PCI card hold-down brackets that secure cards in all three axis (X/Y/Z). In addition, the front panel provides a filtered dust door with a systems status display to quickly monitor the status of the rugged server. Dual redundant 650W power supplies insure support for the latest multi-core processors and high-end PCI Express graphics cards.

Z Microsystems' engineers are experts in the design of systems that reduce the risk, cost and failure caused by harsh environmental conditions. Designed to exceed MIL-STD 167 for vibration and MIL-STD 461 for EMI, ZX1 Stations are a robust solution for hostile, mission-ready applications. Enhanced military options such as EMI filtered power supplies with Mil-Circular connectors and locking security panel are available.



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SPECIFICATIONS

ZX1 Station

Physical	
Dimensions	1.70"H x 17.61"W x 20.00"D (removable P/S)
	1.70"H x 17.61"W x 21.70"D (redundant P/S)
	1.70"H x 17.61"W x 23.81"D (redundant Mil P/S)
Weight	Approximately 22 lbs.
Storage Options	SATA or SAS
Power Supply: Zippy Dual Redundant	
Total Output Power	650 W
AC Input Range	90-132/180-264 VAC
Input Frequency	47-63Hz
Environments*	
Operating Temp	0° to + 50° Celsius. Extended operating temperatures achievable with Solid State Drive.
Non-op Temp	-40° to + 70°C
Operating Humidity	Up to 95% Non-condensing, 30° to 60°C 48 hours <i>*Optional conformal coating to meet full MIL-STD-810F compliance to Method 507.5, 10 days</i>
Non-op Altitude	Up to 40,000 ft.
Operating Altitude	Up to 10,000 ft.
Vibration	MIL-STD-167. Up to 25 Hz. Extended vibration environments are achievable with Solid State Drives. Above 25 Hz throughput will degrade with spinning HDDs.

Shock	40 g's, Saw-tooth, 11ms
Fungus	Non Nutrients/contaminants
Reliability	
Operating Life	10 years
Maintainability	<20minutes @ Line-Replaceable Unit (LRU) Level
Regulatory	
Safety	UL 60950 (used as a guideline)
EMI	Options may require Mil-Spec Power Supplies RE101, RE102 (shipboard levels), RS101, RS103 (up to 20 v/m) CE102, CS101, CS114, CS115, CS116 <i>NOTE: EMI results based on the use of properly shielded and grounded cables connected to the unit.</i>
Quality/Workmanship	
	IPC / ISO 9001:2000 and applicable section of MIL-HDBK-454
MIL-SPEC	
	Additional extended range environmental military specifications can be met with optional enhancements. See your Z Micro representative for details.
<i>*Units are designed and built to meet the following specifications. Results of tests pending.</i>	

ZX1 Station Dimensions for Mil-Spec Dual Redundant Power Supplies

