ZX1C 18
AIRBORNE SERVER

18" Depth, Rugged 1U Server
with Carbon Fiber Elements

High-Performance 1U Server Designed for Airborne Applications

The ZX1C 18 airborne server features a 18" short depth chassis and weighs just under 13 pounds. It offers a smaller, lighter form factor that can accommodate smaller ISR aircraft without compromising server performance and capabilities. Every aspect of the ZX1C 18 is designed to reduce weight including the use of carbon fiber materials (which are stronger than steel and a fraction of the weight), a modified 750W DC power supply and lightweight support brackets.

Advanced Processing

The ZX1C 18 offers the latest computing technologies in a robust, 1U rack-mount form-factor. The ZX1C 18 can be configured either as a high performance dual socketed solution or as a highly flexible solution with a single processor and the option to add up to three PCI expansion cards. The ZX1C 18 also supports two TranzPak 1 removable rugged storage drives each with up to 2TB capacity. Weighing only 4.3 oz. each and utilizing the latest NVMe technology, this palm-sized, removable storage drive combines high speed performance with advanced protection ensuring mission data remains safe and accurate in the most stringent environments.

Lightweight, Rugged Design

The design of the ZX1C 18 required a balance of lightweight materials and proven rugged design features to guarantee operational performance in the most stringent of military applications. The server supports the latest COTS computing technologies and meets full MIL-SPEC compliance for shock, vibration, temperature, EMI/EMC, and altitude specifications. The final result is a proven rugged server in a lightweight package.

The ZX1C 18 integrates the TranzPak 1 removable storage modules which use M.2 NVMe SSDs and are much smaller than traditional 2.5" SSD storage and about 4x faster than SATA-3 solutions.

HIGHLIGHTS

- Single or Dual Socket Motherboard options (Intel® Server Board S2600STB or Super Micro X11SPW-TF)
- Latest Intel® Xeon® Scalable Processors
- NVMe SSD Storage utilizing TranzPak 1 modules
- Support for up to 3 PCIe expansion cards (single socket motherboard variant only)
- High Performance GPU options available
- 750W DC power supply
- 19" RETMA rack-mountable
- Configurations starting under 13 lbs.
- Shock & Vibe: DO-160G
- Operating Altitude: 20,000 ft.
- EMI: MIL-STD-461F

FOR MORE INFO

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

MECHANICAL OUTLINE

FRONT

1.7

19.0

REAR

Single Socket

Dual Socket

17.0

17.5

BOTTOM

1.1

17.8

.6
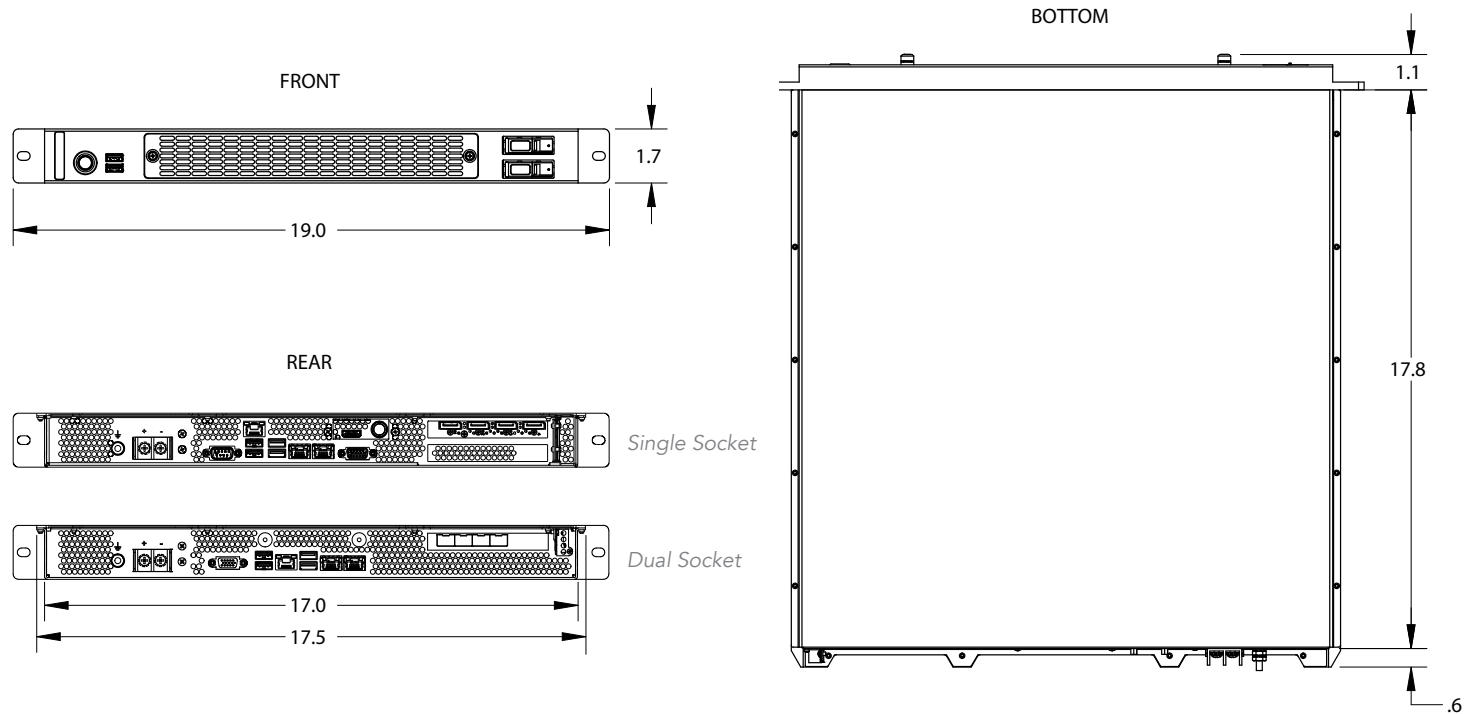
TECHNICAL SPECIFICATIONS

SIZE & WEIGHT	Dimensions	1.7" H x 17.0" W x 17.8" D
	Weight	12.3 - 14.3 lbs. (Depending on configuration)
	TP1 Weight	4.3 oz.
POWER	DC Power Supply	750W Max Supply
	DC Input Range	18-36V DC @ 46 to 26A (Inrush current 100 Amps @ 24V DC @ 25°C)
OPTIONS	Motherboard	Latest Intel® motherboards
	Processor	Latest Intel® Xeon® scalable processors
	Memory	Up to 2TB DDR4 2666MHz Registered ECC Memory
	Storage	Up to 2 TP1 rugged storage modules (2TB each)
	Graphics	Latest NViDIA™ & ATI® graphics video cards
	PCI Add-On Slots	Support for up to 3 PCIe expansion cards (single socket motherboard variant only)
ENVIRONMENTAL	Operating Temperature	MIL-STD-810G, Method 501.5: 0° to 50°C
	Non-Operating Temperature	MIL-STD-810G, Method 501.5: -40° to 70°C
	Operating Altitude	MIL-STD-810G, Method 500.5: Up to 20,000 ft.
	Storage Altitude	MIL-STD-810G, Method 500.5: Up to 45,000 ft.
	Humidity	DO-160F, Section 6, Category A, 50°C and 95% RH
	Shock	DO-160G; Section 7.0 Category B, Type 4
	Vibration	DO-160G; Section 7.0 Category B, Type 4
	EMI/EMC	MIL-STD-461F, Radiated: RE101(Army Limits), RE102 (Aircraft > 25m) RS101, RS103 up to 60V/m Conducted: CE102, CS101,CS114, CS115, CS116
OTHER	Quality	IPC/ISO 9001:2015 and applicable sections of the MIL-HDBK-454