ZM3
MISSION COMPUTER

Space Saving, Ultra-Lightweight Rugged Computer for Airborne ISR Applications

zmicro.com

Smaller, Lighter & Faster Computing

The ZM3 mission computer is designed specifically to minimize size, weight and power for airborne ISR applications. Built to provide advanced compute processing in the smallest form-factor possible, the ZM3 offers full server capability in a small, rugged packaging. The system supports double-wide COTS high-end graphics cards and an additional PCI Express card for custom user expansion. Utilizing an advanced Type 7 COM Express module, the ZM3 can utilize up to 16 Core Intel® Xeon® Processor with up to 48G RAM.

Designed For Airborne Environments

The ZM3 is carefully engineered to handle the extreme conditions of airborne environments. Designed and tested to DO-160G requirements for vibration, shock, temperature, humidity, dust and EMI/EMC, the ZM3 provides powerful compute capabilities with robust environmental design to ensure your missions will be a success.

NVMe Based Removable Storage Drives

Further reducing weight, the ZM3 can house up to two TranzPak 1 rugged storage drives up to 4TB (2TB each), which utilize the latest NVMe technology to provide storage read/write speeds up to 3x faster than SATA and only weigh 3 oz. each.

TranzPak 1 Storage Module

The ZM3 is unique because it's the smallest, lightest rugged mission computer available that can support an NVIDIA GPU card.

HIGHLIGHTS

- Lightweight aluminum construction, weighing less than 10 lbs.
- Compact size: 4.6"H x 5.6"W x 14.2"D
- Up to 4TB NVMe based removable storage
- 2x front access USB 3.0 Ports
- MIL-DTL-38999 Locking Power Connector
- Up to 16 CORE, 1.3GHZ+ Intel® Xeon® processor
- DDR4 RAM, up to 48GB
- Flexible PCI expansion options: Up to 3 PCIe cards
- Onboard dual 10GigE and Audio
- Configurable Dual Serial Ports supporting RS422 or RS232
- 450W, 18-36V DC power input with EMI filter
- Illuminated power button for system status
- Field-replaceable dust filter

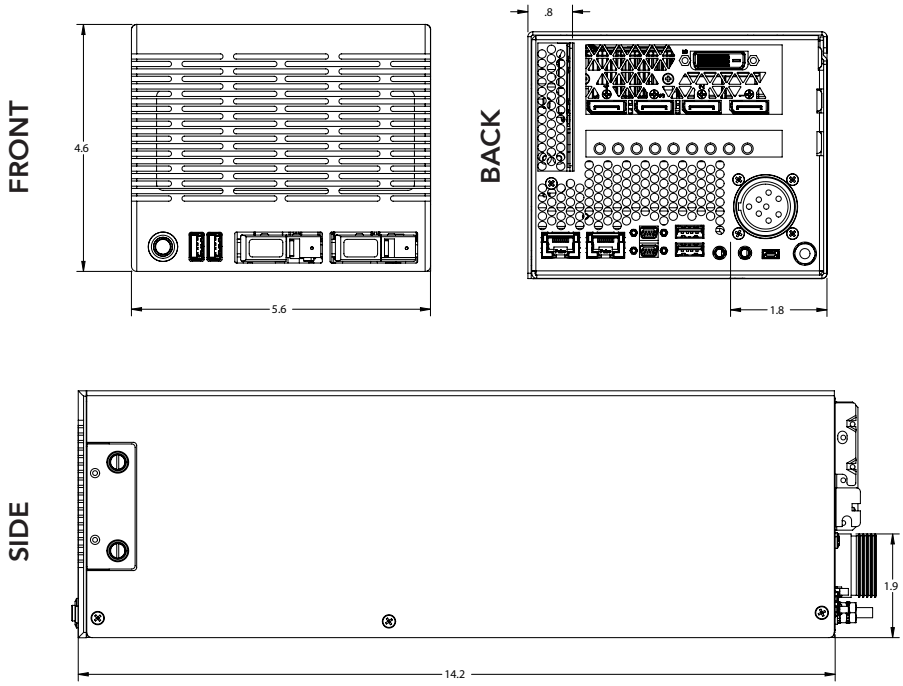
FOR MORE INFO

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

ZM3 | ULTRA-LIGHTWEIGHT COMPUTING

To see all of our rugged computing solutions, visit zmicro.com/servers

MECHANICAL OUTLINE



TECHNICAL SPECIFICATIONS

SIZE & WEIGHT	Dimensions	4.6"H x 5.6"W x 14.2"D
	Weight	9.2 - 9.7 lbs. (depending on configuration)
	TP1 Weight	3.2 oz. each
POWER	Power Supply	DC Power Supply, 450W Max
	Input Range	18-36 VDC @ 46 to 26A (Inrush current 100 Amps @ 24VDC @ 25°C)
OPTIONS	COM Express Module	Type 7 COM Express
	Memory	DDR4 RAM, up to 48GB
	Storage	Up to 4TB of removable TranzPak 1 (TP1) based storage (2TB per TP1)
	Graphics	Latest NVIDIA™ & ATI® graphics video cards
	PCI Add-On Slots	Up to 3 PCIe cards
ENVIRONMENTAL	Operating Temperature	DO-160G Section 4 Cat: A1: -15° to 55°C
	Non-Operating Temperature	DO-160G Section 4 Cat: A1: -55° to 85°C
	Operating Altitude	DO-160G Section 4 Cat: A1: Up to 15,000 ft.
	Non-Operating Altitude	MIL-STD-810G, Method 500.5: Up to 40,000 ft.
	Decompression	DO-160G Section 4 Cat: A1: Up to +8,000 ft.
	Overpressure	DO-160G Section 4 Cat: A1: Up to -15,000 ft.
	Temperature Variation	DO-160G Section 5 Cat: C: -15° to 55°C
	Humidity	DO-160G Section 6 Cat: A
	Shock	DO-160G Section 7 Cat: B Aircraft Type: All Fixed-Wing Type 4
	Vibration	DO-160G Section 8 Cat: S Curve M
	EMI/EMC	DO-160G, Section 16 & 17, Category B; DO-160G, Section 18, Category Z; DO-160G, Section 19, Category AC; DO-160G, Section 20, Category S; DO-160G, Section 21, Category L
OTHER	Quality	IPC/ISO 9001:2015 and applicable sections of the MIL-HDBK-454