CRYSTAL™

Crystal Group FG2 2600 Series: 2U servers

Single or dual processors

48 cores

6 PCIe

M.2: 2
NVMe: 8
SATA: 16

AC or DC power

4TB DDR4

Take real-time AI & ML from the data center to the edge

Equipped with up to four state-of-the-art GPUs and two Intel Xeon Scalable or AMD EPYC processors in an unmatched rugged design, the FG2 2600 Series servers deliver exceptional reliability and Tensor Core performance at the tactical edge. Up to six NVMe drives can be configured for CSfC data storage for applications requiring FIPS 140-2 certification.

Designed to handle challenging, yet critical inference obstacles, the extreme, scalable compute power of the FG2 2600 Series brings ultra-low latency and seamless operation to the most volatile, mission-critical conditions when real-time situational awareness and AI can't be compromised. InfiniBand I/O connectivity provides critical, rapid data transfer for low-latency backhaul applications.

This NVIDIA-Certified System is validated for optimal performance, manageability, security and scalability.

Use cases

- Battlespace management awareness
- Command and control communications
- Intelligence gathering and processing
- Data storage server
- Sensor fusion for air and ground vehicles
- Leader-follower autonomous vehicles
- GPU server
- Virtualization platform

Tested to MIL-STD-810

Humidity | Salt fog | Shock | Electromagnetic compatibility | Vibration | Sand/Dust | Fungus

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Crystal Group FG2 2600 Series technical specifications

Mechanical	**Height:** 3.5" (8.89 cm) **Width:** 17.5" (44.45 cm) **Depth:** 19" (48.3 cm) or 22" (58.88 cm) **Weight:** 32–38 lbs (14.51–17.23 kg)
Mounting	Glides, fixed mount (front and rear), or Jonathan rails
Power Supply	800WAC, 1005W 18–36VDC, or 1200W AC 1+1
CPU Architecture	Gen3 Intel Xeon Scalable or AMD EPYC 7003 series processors
	Up to 48 cores per socket (motherboard dependent)
Memory	16GB–4TB DDR4 ECC SD RAM (motherboard dependent)
Expansion	Up to six low-profile PCIe slots with four NVIDIA A2 Tensor Core GPUs
	Up to three low-profile slots with two NVIDIA A100 Tensor Core GPUs
I/O	Commercial I/O or optional MIL-CIRC connector I/O
External Bays	Up to eight bays populated with FORCE module accessories
	Optional optical drive
Software Compatibility	Windows 10, Windows 11, Windows Server, VMware, Linux
Environmental testing standards	
MIL-STD-810: Environmental Engineering Considerations and Laboratory Tests	**Method 500, Altitude**: 12,500 ft. operation, 40,000 ft. transport [2] **Method 501, Operational Temperature, high:** Procedure II: +50°C, two-hour dwell, four cycles [1] **Method 502, Operational Temperature, low:** Procedure II: -30°C, two-hour dwell, four cycles [1] **Method 503, Thermal Shock:** Procedure II: 10 cycles, -40°C to +55°C, 15-min dwell, <1-min transfer time [2] **Method 507, Humidity**: Procedure II: 240 hours *with optional conformal coating kit* [1] **Method 508, Fungus**: 28 days, mixed spore, 30°C 95% RH [2] **Method 509, Salt fog**: 48-hour test [2] **Method 510, Sand-Dust**: Procedure I: Blasting dust, 12 hours [2] **Method 513, Acceleration**: Procedure II: 9g [2] **Method 514, Vibration:** Procedure I: 4.7G, 5–2,000Hz, 60 min/axis, 3 axis [1] **Method 516, Shock**: Procedures I & V: 40G, 11ms, 18 pulses, 3/axis both directions [1]
MIL-STD-1474E	**Acoustic Noise,** Requirement S, Grade A3 [2]
MIL-STD-167-1A	**Ship Vibration,** Type 1 [1]
MIL-S-901E	**Shipboard Shock,** Class II, A/B [2]
Electromagnetic compatibility standards	
MIL-STD-461	**EMI/EMC,** RE102, CE102; surface ship, below deck, and ground [1]

Different options for different needs

The FG2 product family also includes the 1100 1U Series and 3700 3U Series servers to accommodate different edge computing needs. **Contact us** to determine the best FG2 solution to achieve your edge computing and AI objectives.

In-house test reports provided for baseline units; customer-specific test options available upon request.
1: Test report available
2: Testing in progress

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AS9100D CERTIFIED ISO 9001

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DOC-00845 REV A 8/22