

# **Crystal Group FG2 3700 Series: 3U servers**



# Achieve an information superiority at the speed of relevance

Designed with up to four of the world's highest-performing GPUs and either Gen3 Intel® Xeon® Scalable or AMD EPYC<sup>TM</sup> processors with the latest PCle Gen4 interconnectivity, the Crystal Group FG2 3700 Series servers deliver incomparable acceleration for data processing, machine learning, Al training, and Al inference. The scalable configuration can also accommodate ultra-fast DPUs. Enhancing the GPUs with DPUs enables unprecedented data and application security, data center and cloud application performance, ultra-low latency and loss-less networking at the edge.

The compact, rugged design integrates high-capacity, long-life, custom power supplies, a dedicated air plenum, and custom heat sinks for optimal thermal performance in a compact under high computational loading. This ensures reliable, seamless execution of mission-critical applications—from real-time sensor fusion and object recognition to video processing and ray tracing—with complete, accurate, actionable intelligence.

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

## **Use cases**

- Tactical battlespace management
- Command and control networking
- Intelligence gathering and data processing
- Multi-sensor fusion aggregation
- Data storage server (NVMe, SAS, or SATA)
- GPU server

#### **Tested to MIL-STD-810**















Sand/Dust



Fungus

# **Crystal Group FG2 3700 Series technical specifications**

Mechanical	Height: 5.25" (13.33 cm) Width: 17.5" (44.45 cm) Depth: 19" (48.26 cm) or 22" (55.88cm) Weight: 38-42 lbs (17.23-19.05 kg) or 40-62 lbs (18.14-28.12 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 AMC EPYC 7003 series processors
	Up to 64 cores per socket (motherboard dependent)
Memory	16GB-4TB DDR4 ECC SD RAM (motherboard dependent)
Expansion	Up to seven full-height PCle slots
External Bays	Up to 12 bays populated with FORCE module accessories Removable drive carrier: Up to 24 SATA or SAS SSDs
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 <sup>2</sup>
MIL-STD-167-1A	Ship Vibration, Type 11
MIL-S-901E	Shipboard Shock, Class II, A/B <sup>2</sup>
	Electromagnetic compatibility standards
MIL-STD-461	EMI/EMC, RE102, CE102; surface ship, below deck, and ground <sup>1</sup>
RTCA/DO-160	Aircraft and airborne equipment, Category M <sup>2</sup>

## **Different options for different needs**

The FG2 product family also includes the 1100 1U Series and 2600 2U Series servers to accommodate different edge computing needs. **Contact us** to determine the best FG2 solution to achieve your edge computing and Al 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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