

Crystal Group FG2 3700 Series: 3U servers



-  **Single or dual processors**
-  **64 cores**
-  **Up to 7 full-height PCIe slots**

-  **M.2: 2
NVMe: 12
SATA: 24**
-  **AC or DC power**
-  **Up to 4TB DDR5 ECC RDIMM**

Achieve information superiority at the speed of relevance

Designed with up to four of the world's highest-performing GPUs and either Intel® Xeon® Scalable or AMD EPYC™ processors with the latest PCIe Gen5 interconnectivity, the Crystal Group FG2 3700 Series servers deliver unmatched acceleration for data processing, machine learning, AI training, and AI inference. The scalable configuration can also accommodate ultra-fast DPUs. Pairing GPUs with DPUs enables enhanced data and application security, increased data center and cloud application performance, and ultra-low latency networking at the edge.


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

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


Use cases

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


Tested to MIL-STD-810




Humidity




Shock



Operational Temperature



Vibration



Altitude

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 | 4th Generation Intel Xeon Scalable or AMC EPYC 9004 series processors |
| | Up to 96 cores per socket (motherboard dependent) |
| Memory | 16GB–4TB DDR5 ECC RDIMM (motherboard dependent) |
| Expansion | Up to seven full-height PCIe slots |
| External Bays | Up to 24 SATA or SAS SSDs |
| | Up to 12 U.2/U.3 NVMe 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 <i>with optional conformal coating kit</i> 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 |
| RTCA/DO-160 | Aircraft and airborne equipment , Category M ² |

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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