

HD-7620-x
Edge AI Tactical Rugged Servers

Based on the powerful Dell PowerEdge® XR7620 platform, the HIPER Global HD-7620-x is a highly customisable modular steel chassis solution supporting variable I/O and removable storage options. With redundant hot swap power supplies, the HD-7620-x is designed to support the performance and features of two Intel® Xeon processors. Featuring multiple I/O expansion options and support for a variety of connectivity configurations, the HD-7620-x family of products are the optimal solution for the most demanding rugged edge requirements.

General Specifications

Processor	• Two 4th Generation Intel® Xeon® Scalable processors with up to 32 cores per processor • Two 5th Generation Intel® Xeon® Scalable processors with up to 16 cores per processor
Memory	• 16 DDR5 DIMM slots, supports RDIMM 2 TB max, speeds up to 5200 MT/s. • Supports registered ECC DDR5 DIMMs only
I/O & Expansion	• Multiple LAN port options via PCIe and/or OCP – 1Gb, 10Gb, 25Gb, 100Gb, 200Gb – Copper and Fiber • 2x 1Gb LOM Ports • IPMI LAN port for remote access and monitoring • 1x TPM Header • 1 x iDRAC Direct port, 1 x iDRAC dedicated RJ45 port • 1 x USB 3.0 and 1 x USB 2.0 port • 1 x DB-15 VGA • Multiple PCIe & OCP configuration options
Storage **Storage Controllers**	• Front Bays: Up to 4 x 2.5-inch SAS/SATA/NVMe SSD drives, 61.44 TB max, Up to 8 x E3.S NVMe direct drives, 51.2 TB max • Internal Controllers: PERC H965i, PERC H965e, PERC H755, PERC H355, HBA355i • Internal Boot: Boot optimised storage subsystem • (BOSS-N1): HWRAID 1, 2 x M.2 NVMe SSDs • External HBA (non-RAID): HBA355e • Software RAID: S160
Form Factors & Dimensions	• xU Rack Server • 3.5 x 17 x 18” (HxWxD) - Default • Base Weight: +/-25lbs
Environmental	• Operating Temperature: 0°C - 50°C (32°F - 122°F) • Non-Operating Temperature: -40°C - 70°C (-40°F - 158°F) • Operating Relative Humidity: 8% - 90% (non-condensing) • Non-Operating Relative Humidity: 5% - 95% (non-condensing)
Power Supplies	• 1800 W Titanium 200—240 VAC or 240 HVDC • 1400 W Platinum 100—240 VAC or 240 HVDC • 1100 W Titanium 100—240 VAC or 240 HVDC, hot swap redundant • 1100 W -48 — (-60) VDC
Systems Cooling	Air cooled, variable speed fans with proprietary RPM control board
Embedded LOM	2 x 1 GbE LOM, 1 x OCP card 3.0 (Optional)
Management	iDRAC9®, iDRAC Direct, iDRAC RESTful API with Redfish™, iDRAC Service Module, NativeEdge™ Endpoint Orchestrator
GPU	Multiple GPU configuration options planned
Support	Multiple warranty and support options - contact a HIPER Global sales representative for more information

Extended Features

- xU chassis – short (18" depth - default) Front or Rear I/O
- Based on Dell PowerEdge XR7620 platform
- Multiple PCIe® and OCP expansion slot configurations
- Front removable CMOS battery
- Variable fan speed selection
- 4x2.5" SATA/SAS/NVME™ storage bays

Suggested Markets

- Military & Defense
- Industrial & Manufacturing
- AI / HPC
- Surveillance & Cybersecurity

Custom Options

Height	1U, 1.5U, 2U, 3U, Custom
Depth	Base 18" – Variable based on depth requirements or component needs
I/O	Front or Rear
Power	Single or Redundant, Auxiliary power for discrete PCIe cards (i.e. GPU)
Riser	PCIe - Qty.2 x16 or Qty.3 (1) x16, (2) x8 or Qty.4 x8
Rail mount	Hole patterns to support client specific rails and/ or Dell Ready Rails
Cooling	Fan RPM Control with Low, Medium, High selection switch
Ruggedisation	Features to support a wide range of Shock and Vibration validation: PCIe card secure support, Cabling and Module retention
Maintenance	Front removable CMOS Battery
Support	Structured to meet customer needs: Return to Depot, Multiyear, 24x7, Onsite, other

**Contact HIPER Global directly or through your Dell representative to review custom configuration options.*

Mil-Spec Regulatory Compliance - *(Design to Meet)*

MIL-STD-810H	Operational and Non-Operational Temperature Operational and Non-Operational Humidity
MIL-STD-1399	Electric Power Section 300B, AC
MIL-STD-461F	CE102, CE Part Class A, and CE Mark (EMI)
MIL-STD-1474D	ABN - Airborne Noise Requirement 5
MIL-STD-740-2	SBN - Structure Borne Noise (85dB limit)
MIL-STD-167-1	Vibration (Tailored Shipboard Limits)
MIL-STD-901D	Shock Test, 20G 50ms Half Sine
MIL-STD - TBD	Optional MIL-Spec derived from Customer Specific Requirements

Safety Regulatory Compliance - *(Design to Meet)*

IEC/UL 62368-1	Audio/video, information and communication technology equipment - Part 1: Safety requirements
IEC 62311	Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz to 300 GHz)
EN 62479	Assessment of the compliance of low power electronic and electrical equipment with the basic restrictions related to human exposure to electromagnetic fields (10 MHz to 300 GHz)
OTHER	Optional Compliance derived from Customer Specific Requirements

EMC Regulatory Compliance - *(Design to Meet)*

FCC 47 CFR Part 15	Radio Frequency Devices (Sub-Part B)
EN 55032 / CISPR 32	Electromagnetic compatibility of multimedia equipment - Emission Requirements
EN 55035	Electromagnetic compatibility of multimedia equipment - Immunity requirements
EN IEC 61000-3-2	Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current 16 A per phase)
EN IEC 61000-3-3	Electromagnetic compatibility (EMC) - Part 3-3: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current 16 A per phase and not subject to conditional connection

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