

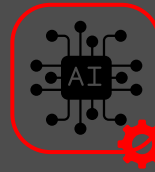
HIGH- PERFORMANCE AI SERVER

NEXUS

**ITAR
FREE**

**ON-THE-GO
TRAINING**

**ULTRA
FAST**



**SEAMLESS
SCALE-UP**

COMPACT

Introducing the NEXUS series of high-performance computing servers.

The NEXUS servers turn raw Big Data into tiny actionable signatures that allow customers to gain insights ultra-quickly and augment the existing knowledge database as data is being collected, effectively training the Artificial Intelligence (AI) engine on the go.

The starting point is the single-card NEXUS-1 server rack with a massive 300 TOPS (trillion operations per second) AI performance by default (max 1200 TOPS).

This slim rack is fanless and will satisfy time-critical inferencing of transformers, convolutional neural networks and many other advanced machine learning models.

This is supported by a minimum of 16 power-efficient, hard cores Intel i7, ARMv8 or Intel Xeon family processors to handle any pre/post-processing and interface tasks seamlessly.

The computing capacity scales seamlessly by adding more AI-dedicated server cards as with our NEXUS-8 and NEXUS-16 servers. Other server capacity is possible.

AICRAFT helps customers quantify their Big Data support requirements and match the hardware accordingly to save on time and cost – no hidden charges.



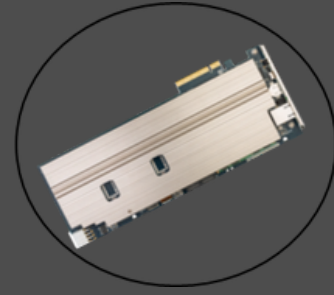
More info
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Key benefits

- World-leading AI engine
- Training on-the-go
- AI-capable ultra-fast Big Data processing
- Compact size and fanless
- High operating temperature range



Technical specifications (Nexus-1 configuration)

Computing performance

Processor	16- or 24-core Intel i7 (or 16-core ARMv8 or Intel Xeon family)
ML co-processor	300 TOPS peak performance (up to 1200 TOPS)
RAM	64 GB DDR4 SDRAM with ECC (up to 128 GB)
Storage	4 TB SSD with ECC (up to 8TB)

Interfaces

USB 3.0	4x 5 Gbps
Ethernet	2x 2.5 Gbps 1x 10 Gbps
PCI Express	1x PCIe 16x Gen 5 slot

Software

Operating system	Linux or Windows
ML compiler	All common frameworks

Properties

Input voltage	12V
Power consumption	< 200W
Mass	5,000 g (approx.)
Dimensions (L x W x H)	430mm x 250mm x 44mm
Operating temperature	0°C to +60°C (standard) -40°C to +85°C (rugged)