



## Industry's Best Ratio of Performance-to-Power

Integrates leading AI performance combined with low power use provided by Gyr Falcon's Lightspeur® 2803 AI Accelerator chips, together with Arm® core based multi-core processor ICs. The Gyr Falcon Accelerator chips are mounted on M.2 cards, and they can function independently or aggregated to work on large AI models. Each sub-system is connected to the server via a PCIe interface. Each AI Module delivers 67 TOPS, and 1,200 FPS, consumes only 5 watts of power. delivering 240 FPS/W.

Component	Type	Number
Chassis	2U, 19-inch rack mount	1
Fan	Twin type	4
PSU	1,100 W (hot spare)	2
Motherboard	5 x Arm® based cores, On-board DDR3 x 15	1
CPU Slot	PCIe x 4 Gen2, Ethernet 1 Gbps	32
CPU Board	1 x Arm® based core, DDR4 8GB x 2, M.2 expansion for AI module, Storage eMMC 64GB	32
AI Module	Lightspeur® 2803S x 4 (67 TOPS)	32
Accessories-1	Power Cable 1.8m	1
Accessories-2	Rack Rail, LAN Cable 3m, Manuals	1 (each)

Processor & AI Module	Specification
Voltage	DC 12V
Consumption	16W (Max)
Operating Environment	Temperature 10-35° Humidity 20-80% (no condensation)
Storage Environment	Temperature -40-70° Humidity 5-95% (no condensation)
Weight	135g (w/o heatsink for M.2)
Size	220 x 63 x 23 mm

### Server Configuration

- 32 x AI Module Slots and Ports
- High performance CPU
- Redundant power supplies
- Twin type fans

### AI Module

- PCIe Accelerator Card
- Gen2 x16 as 4 x 4 bifurcated lanes
- 4x Lightspeur® 2803S

### Supported AI Models & Performance

- VGG 2,944 FPS
- ResNet 20,480 FPS
- MobileNet 12,800 FPS

### Supported Frameworks

- TensorFlow
- Caffe
- PyTorch

### Cascade & Parallel AI Model Processing

### Targeted Inference Applications

- Image Recognition
- Object Detection & Tracking
- Natural Language Processing
- Natural Language Understanding
- Business Intelligence
- Visual Analysis

### Targeted Use Cases

- Unmanned store / warehouse
- Smart city / retailer / factory
- Artificial Intelligence of Things