1U Edge Server with Intel® Atom® Grand Ridge Processor and 1 x NVIDIA RTX PRO™ 4500 SE

SE110-1

Senao SE110-1 is a 1U compact edge server powered by Intel® Atom® Grand Ridge processors, designed for high-density networking, multi-access edge computing (MEC), and secure enterprise gateways. Featuring 8 x 2.5GbE, 4 x SFP+, and 4 x SFP28 ports, it provides exceptional 160 Gbps connectivity and high-speed uplinks. Equipped with NVIDIA RTX PRO™ 4500 SE GPU card, SE110-1 is ideal for lightweight edge AI platform.

Processor

Latest E-core Atom® Processor

Intel® Atom® SoC Grand Ridge with up to 24 cores delivers power-efficient performance for edge workloads

GPU

1 x NVIDIA RTX PRO™ 4500 SE

Inference — FP16: up to 9B / FP8: up to 19B / NVFP4: up to 37B
Fine-Tuning — LoRA: up to 10B / QLoRA: up to 24B / Full-Param: up to 2B

Memory

DDR5 ECC SO-DIMM

2 x DDR5 SO-DIMM slots with ECC keep edge services stable under sustained load

Connectivity

160 Gbps aggregate

8 x 2.5GbE, 4 x 10G SFP+, and 4 x 25G SFP28 ports

Storage

NVMe SSD

1 x PCIe Gen3 M.2 2280 NVMe via riser card

Security

Hardware Root of Trust

TPM 2.0 with optional PFR 2.0 safeguards firmware integrity from power-on through runtime

Management

Edge SCM

Optional edge SCM with BMC and PFR enables

Deployment

Compact Short-Depth Design

310 mm depth 1U chassis with 5 smart fans and one 700W 80 PLUS Platinum PSU fits tight racks

Technical Specifications

GPU Server	
Model Name	1U Edge GPU Server
Model Number	SE110-1
Form Factor	1U Rackmount
Processor	Intel® Atom® Grand Ridge P6962-3 (24C, 2.2 GHz) P6942-3 (16C, 2.2 GHz) P6922-3 (8C, 2.2 GHz)
GPU	1 x NVIDIA RTX PRO™ 4500 SE
Memory	2 x DDR5 SO-DIMM Slots
Storage	1 x PCIe Gen3 M.2 2280 Storage via riser
System Cooling	Air Cooling (5 x Smart Fans)
Expansion Slot	1 x PCIe Gen3 x 8 FHFL
I/O Port	8 x 2.5GbE, 4 x SFP+, 4 x SFP28 1 x Micro USB 2 x USB 3.0 type A 1 x RJ45 MGMT Port 1 x Reset Button 1 x Power Button
Power Supply	1 x 700W AC Slim Power Supply, 80 PLUS Platinum
Security and Management	TPM 2.0 Edge SCM (Optional), Platform Firmware Resilience (PFR) 2.0
Dimensions (W x D x H)	438 x 310 x 44 mm

High-Performance AI & Graphics Acceleration

GPU Support: 1 x NVIDIA RTX PRO™ 4500 SE

LLM Workload Capacity:
Inference — FP16: up to 9B / FP8: up to 19B / NVFP4: up to 37B
Fine-Tuning — LoRA: up to 10B / QLoRA: up to 24B / Full-Param: up to 2B

Target Workloads:

AI-Powered Next-Generation Firewall (AI NGFW)
An on-premises inference firewall with the GPU built into the appliance. Runs an 8B-class model at FP16, or a 14B-class model at FP8, with small embedding and classifier models resident alongside. Handles alert triage and summarization, phishing and BEC intent analysis, obfuscated-script deobfuscation, semantic DLP, and natural-language-to-policy authoring. All inference stays inside the appliance — traffic, logs and file contents never leave the box, meeting data-sovereignty.

System Memory Size: 64 GB

Hardware Overview

SE110-1 (1U Edge GPU Server)

Front View

Rear View

Senao Networks

Product specifications, configurations, certifications, and availability are subject to change without notice and may vary by region and customer program. Final commitments are governed by the applicable quotation, statement of work, or executed agreement.