

Enabling Intelligent Stores – Store Analytics



Turning Retail Data into Real-Time Insights

Every retailer wants to understand what's happening in their stores—from product availability and promotional compliance to safety hazards and beyond—but gaining a complete, real-time picture has historically been difficult. Sales and inventory data only tell part of the story, creating blind spots in the front of store that can lead to missed sales, suboptimal layouts and frustrated shoppers.

Edge AI changes this. With automated processing video data on-site, retailers can track real-time shelf conditions and promotional execution in order to trigger actions like restocking shelves or ordering product. Real-time awareness of item availability can update online channels to reduce costly substitutions or optimize delivery routes, while busy store associates appreciate the assistance in keeping track of endless details. Together, this creates a smarter, more responsive store environment that aligns products, people, and operations with actual demand, helping retailers maximize sales, reduce operating costs and optimize the customer experience.

Challenges of Legacy Store Analytics Approaches

- Manual data collection limits real-time shopper insights.
- Disconnected systems hide trends across locations.
- Post-fact insights delay operational decisions.
- Legacy platforms misinterpret traffic, leading to incomplete conclusions.
- Limited integration blocks actionable, cross-functional insights.

Supermicro and NVIDIA AI-Enhanced Store Analytics

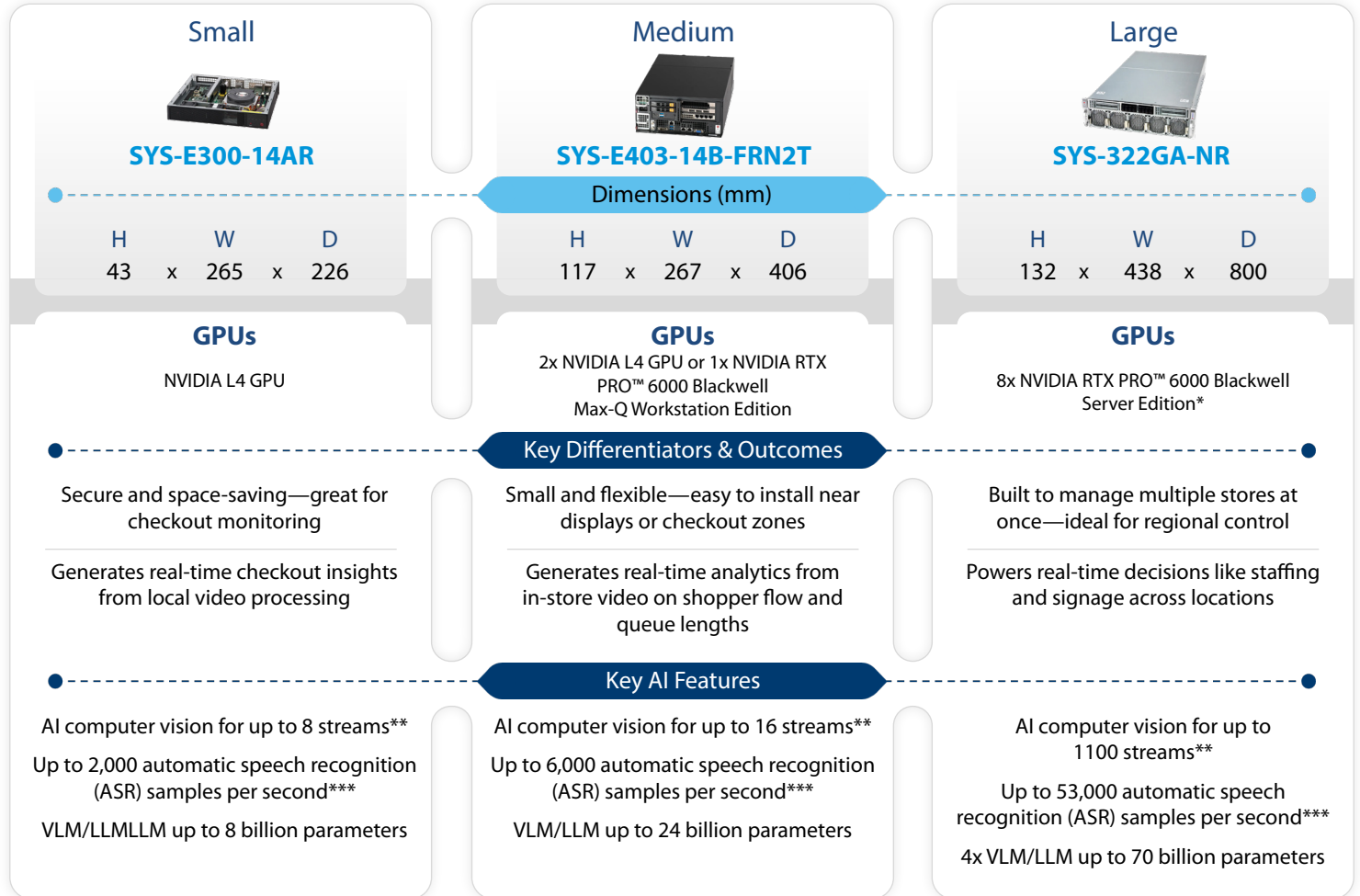
- Enhances tracking of customer movement, dwell time, and display engagement with edge-ready compute.
- Supports automated responses like detecting stock-outs or triggering promotions.
- Enables real-time insights to optimize store layout and staff allocation while preserving privacy.



Supermicro and NVIDIA collaborate with software partners like Augmodo, whose Spatial AI helps track stock, optimize staff workflows, and improve store operations in real time. [Learn more about Augmodo](#)

Enabling Intelligent Stores – Store Analytics

Supermicro Systems for Store Analytics



* NVIDIA RTX PRO™ 6000 Blackwell Server Edition at 400W

** Based on image classification model similar to EfficientNet-B4

*** Based on using an ASR model like QuartzNet



Supermicro Systems Accelerating Your AI journey

Supermicro's AI-ready infrastructure solutions enable large-scale training to intelligent edge inferencing, allowing retailers to streamline and accelerate AI deployment. Their AI-infrastructure empower workloads with optimal performance and scalability while optimizing costs and minimizing environmental impact.

Supermicro and NVIDIA deliver scalable, edge-ready infrastructure that brings AI to life in every retail environment.. Built on NVIDIA Enterprise AI Factory–validated designs, this partnership provides the foundation to run advanced AI workloads in stores, while addressing real-world constraints such as limited space, power efficiency, and cooling. By simplifying deployment and enabling real-time insights, retailers can reduce shrink, optimize staffing and operations, improve product availability, and enhance the customer experience—unlocking productivity gains and building future-ready stores.

For more information, visit: [Supermicro.com/IntelligentStore](https://www.supermicro.com/IntelligentStore)