



SYS-E403-12P-IPA2-C: Supermicro Outdoor Edge AI Server Improves Road Safety and Enhances Traffic Management



Supermicro Outdoor Edge AI Server Built for Flexible, Pole-Mounted Edge Deployments

The Supermicro [outdoor edge AI server](#) is positioned close to end users with a high-performance, multicore Intel® Xeon® Scalable processor for low latency, high bandwidth inferencing at the edge. Using a combination of video cameras and LiDAR sensors, edge servers process traffic data directly at the roadside — without sending it to the cloud. This enables AI models to interpret roadway conditions in real time, providing instant situational awareness to traffic operations teams and connected vehicle systems.

Scenarios like giving priority to cyclists and ambulances by changing traffic lights in real time creates safer conditions for everyone. Smarter traffic signal timing based on congestion data optimizes the efficiency of traffic flow. These use cases are empowered by the Intel Metro AI suite and leverage OpenVINO™ Toolkit, Intel® SceneScape, Intel® Deep Learning Streamer (Intel® DL Streamer), and Edge Video Analytics Microservice.

Key Features



Weatherproof,
Extreme
Temperature



Multi Core



Self
Diagnostics



AI at the
Edge

Intel Products & Technology



[Intel® Xeon® Scalable Processors](#)

[Intel® SceneScape](#)



[OpenVINO™ Toolkit](#)

[Intel® Deep Learning Streamer](#)

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