

AI for Manufacturing, Without Deep Learning or GPUs

Predictive Maintenance

iOmniscient's Predictive Maintenance solution leverages proprietary intuitive AI to detect early signs of equipment failure—without relying on deep learning or GPUs. By analyzing multi-sensory inputs such as video, sound, and smell, the system identifies anomalies like overheating, wear and tear, or leaks across diverse assets including pumps, motors, and conveyor belts.

Its lightweight architecture and QUICK Training engine require minimal data—at most 10 samples of the equipment in normal operation—to build effective models, enabling rapid deployment and cost efficiency. Optimized for Intel® Core™ processors and Intel® Xeon® servers, the solution delivers scalable, real-time fault detection with reduced power consumption and bandwidth usage, making it ideal for industrial environments seeking smarter, sustainable operations.



Key Intel-Enabled Features



Real-Time
Detection



Multi-Sensor
Fusion



Rapid Model
Training



Energy
Efficient

Powered by Intel® Core™ processors and Intel® Xeon® servers, iOmniscient's predictive maintenance system enables:

- Real-time detection with high-performance CPUs for instant fault identification
- Multi-sensor fusion supported by scalable compute for complex data processing
- Low power operation using efficient CPU architecture to reduce energy demands
- Rapid model training accelerated by evolving Intel CPU capabilities

Intel Products and Technologies

- [Intel® Core™ Processors](#)
- [Intel® Xeon® Servers](#)

*Efficient AI --
No GPUs,
No Heavy
Compute,
No Problem*

Ordering Guidance:

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Country/Geo: Worldwide

Edge Vertical/Industry: Transportation; Manufacturing & Robotics

Edge/Use Cases : Predictive Maintenance, Quality Control; Operational Diagnostics

Learn more:

- [iOmniscient Website](#)

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