Real-Time Defect Detection for Smart Manufacturing

Knit-I Insight

COUNT AI x ASUS x intel.

Knit-I Insight is an edge AI surface inspection platform that detects material defects in real time—at 0.1mm resolution, with sub-50ms response—directly on the production line. It turns continuous-process manufacturing into a traceable quality system.

Deployed across 400+ production lines in 6 countries, Knit-I Insight uses computer vision models trained on billions of real-world surface samples to identify defects, trigger immediate machine response, and log every event with full audit traceability. Manufacturers cut material waste by up to 95% and recover investment in under 8 months[1]—across textiles, non-wovens, packaging, plastics and rubber.

Knit-I Insight runs on the ASUS NUC 14 Pro with Intel® Core™ Ultra processors and with built-in support for the OpenVINO™ toolkit. The compact edge system delivers enterprise-grade AI inference on the factory floor—24/7, with zero cloud dependency.

Edge AI surface inspection at 0.1mm, sub-50ms—cuts waste up to 95% with ROI in under 8 months.[1]

Intel Products & Technologies

Accelerating AI and analytics at the edge

- Intel® Core™ Ultra Series 3 Processors
- Intel® Core™ Processors
- Intel® Xeon® Scalable Processors
- Intel® Arc™ Graphics
- OpenVINO™ Toolkit
- Intel® Deep Learning Boost

Key Intel-Enabled Features

Real-Time AI and analytics make it easy

Real-Time Detection

Edge-Native AI

Full Traceability

Retrofit-Ready

Powered by Intel Processors and optimized with the OpenVINO™ toolkit, CountAI and ASUS deliver:

01

High-resolution vision inference on-device

02

Real-time detection at the edge

03

Low-power edge compute footprint

04

Scalable multi-line factory deployment

That's the power of Intel Inside.

Country/Geo:

Worldwide

Verticals:

Video Safety & Critical Infrastructure
Transportation
Manufacturing
Robotics

Use Cases:

Smart Buildings; Intrusion Detection; Quality Control; Operational Efficiency; Worker Safety; Quality Inspection; Process Optimization; Airports Infrastructure; Vision Guided Robots

About CountAI

CountAI builds edge AI and computer vision systems for real-time industrial inspection. Founded by engineers from IIT Madras, Toyota, and Philips, CountAI has deployed 400+ production-grade AI systems across 6 countries. Its platform serves manufacturers in text packaging, non-wovens, rubber, and other continuous-process industries worldwide.

www.counton.ai

KNIT-i Insight - Edge AI Partner Spotlight

intel ai
Intel® AI Edge Applications

About ASUS

ASUS is a global technology company driven by innovation and passionate about enhancing digital life. It designs and delivers a broad range of products and solutions that empower people and organizations, combining cutting-edge engineering, quality, and sustainability to create intuitive, reliable experiences for users worldwide.

www.asus.com

ASUS NUC 14 Pro - Edge AI Partner Spotlight

intel ai
Intel® AI Edge Systems

[1]Intel does not control or audit third-party data. You should consult other sources to evaluate accuracy.

06/26