

Smart Retail: Fridge Planogram Monitoring

Continuous shelf visibility. Intelligence at the edge.

Automated Shelf Audits | Planogram Compliance | On-Device Vision AI



Continuous shelf monitoring with on-device Vision AI, no manual checks needed.

A smart vision system monitors products in a refrigerator or retail display, with all processing done at the edge. The system recognizes every product on each shelf and compares its position with the predefined planogram. It detects products in the correct place, misplaced products, empty or missing slots, and product categories on the shelves. Retailers get a continuous, clear view of shelf conditions without manual inspection, helping to improve product availability, keep placement correct and support better store operations.

SHELF ANALYSIS

- Products in the correct location and misplaced products
- Empty or missing product slots and product categories

RETAIL VALUE

- Higher product availability and consistent planogram compliance
- Less time spent on manual shelf inspection

EDGE AI COMPUTE

Grinn AstraOneSBC-1680 (Synaptics SL1680)

- Quad-core Arm Cortex-A73 with integrated 7.9 TOPS NPU
- AI runs fully on the board, no extra accelerator needed

Illustrative dashboard view. Hardware labels in the image refer to a different configuration; the platform described here is specified separately.