

INDUSTRIAL AI APPLIANCE FOR MACHINE VISION ON THE EDGE

MSX-AI-5000

Ready-to-use hardware with MSX-AIRIS license inside

Non-intrusive quality control

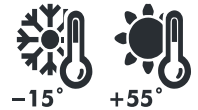
Customizable skills

Deep learning and vision processing embedded

Up to 6 cameras

Web app and Android app

MQTT and OPC UA interfaces



The MSX-AI-5000 is an artificial intelligence-based industrial edge vision system. Through this product, we offer a solution for industrial quality control and maintenance engineers seeking to automate quality control tasks for manufactured parts, by providing them with our user-friendly complete machine vision system: hardware module, industrial cameras, and AI-assisted embedded processing. Unlike complex

and too specific competing solutions, the MSX-AI-5000 by ADDI-DATA is a versatile product that allows to increase speed and accuracy of error prone tasks such as visual inspection, thus preventing non-detection of defects while ensuring process transparency. This system allows to perform different applications on the same hardware base by installing various skills (see catalog). These skills are developed to best fit specific use cases

constraints, and are easily reconfigurable if further requirement arise. The user friendly interface enables an uncomplex administration and setting of the system, thus ensuring maximum efficiency and minimum efforts.

Feel free to reach us!

MSX-AIRIS on the edge:

- Multi-camera and camera agnostic
- Data acquisition and management features
- ONNX Deep Learning models deployment (segmentation, classification, object detection ...)
- Classic computer vision post-processing: OCR, tracking, object recognition, color filtering, thresholding ...
- 2D/3D Machine vision
- Integrable in your MLOps pipelines
- Embedded user interfaces (Web app and Android app)
- OPC UA and MQTT ready
- Customizable with Python SDK and development tools
- Authenticated and encrypted data communication: TLS protocol

Embedded operator-friendly user interface:

- No-coding skill management and system administration
- Easy-to-use camera setup interface

Hardware:

- Based on Nvidia Jetson Xavier NX (other on request)
- 1x Gb Ethernet for LAN connectivity
- 4x USB 3.2 ports for UVC cameras
- 2x PoE ports for GigE cameras
- 1x HDMI output for dashboard
- Wi-Fi connectivity
- Cascade mounting with ADDI-DATA products to build an ecosystem
- Other interfaces on request*: 4G, Ethercat...

Fields:

- Quality control
- Predictive and corrective maintenance
- Smart city and many others...

Use cases:

- Manufactured parts visual inspection
- Assembly check
- Surface inspection
- 3D volumetric measurement and many others...

Service on request :

Deep learning-embedded neural network training and dataset creation for customer-specific industrial needs.
Contact us to request an offer!

CUBIC 3D MEASUREMENT



- No calibration
- Millimetric precision
- Multi-object
- Low light compatible
- Non intrusive measurement
- High rate measurement

ADVANCED QUALITY CONTROL



- Feature detection
- Feature classification
- Surface inspection
- Component placement check
- Real-time edge computing
- Multi-object
- Multi-camera