

INDUSTRIAL AI APPLIANCE FOR EDGE MACHINE VISION



MSX-AI-5000

Ready-to-use hardware with built-in MSX-AIRIS license

Non-intrusive quality control

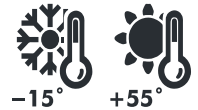
Customizable "Skills"

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 industrial AI appliance for edge machine vision. 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 requirements 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 ...
- 3D machine vision with points clouds processing
- Integrable in MLOps pipelines
- Embedded user interfaces (Web app and Android app)
- OPC UA and MQTT ready
- Customizable "Skills"
- Authenticated and encrypted data communication: TLS protocol

Embedded operator-friendly user interface

- No-code "Skills" management and system administration
- Easy-to-use camera setup interface

Hardware

- Based on Nvidia Jetson Xavier NX (other on request)
- 1x Gb Ethernet port 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 other ADDI-DATA products for complete integration
- Other interfaces on request*: 4G, Ethercat...

Application fields

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

Use cases

- Defects detection
- 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!

3D VOLUMETRIC 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