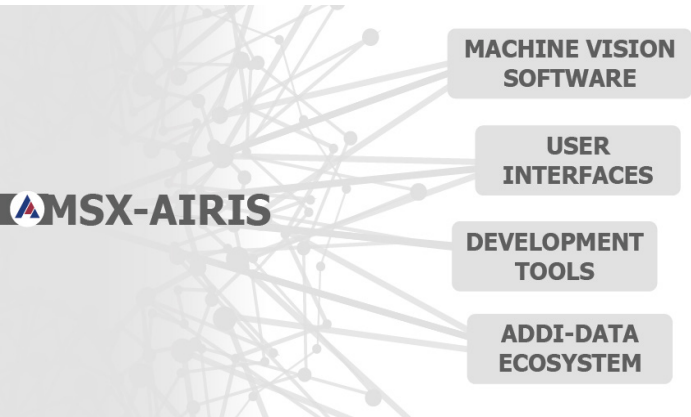




INDUSTRIAL AI PLATFORM FOR EDGE MACHINE VISION



MSX-AIRIS

- Multi-camera and camera agnostic
- Data acquisition and management features
- ONNX Deep Learning models deployment
- 2D/3D machine vision
- Integrable in MLOps pipelines
- Embedded user interfaces (Web app and Android app)
- OPC UA and MQTT ready
- Customizable with Python SDK and development tools

The MSX-AIRIS software is an industrial AI platform for edge machine vision. It allows vision engineers and data scientists to deploy ONNX models on their edge systems, with no-code administration interfaces. It enables the execution of artificial intelligence algorithms in real-time, without any cloud connection, making the system more resistant to disturbances and less sensitive to environmental variations. It

contains an intelligent industrial agent software with its user interfaces, and allows developers to customize the executed algorithms using development tools (IDE, SDK), in applications named "Skills". From the developer's point of view, integration, sensor and actuator interfaces, cybersecurity and communication issues are managed by MSX-AIRIS, allowing the developer to focus on his business logic, thanks

to an ONNX model or to our vision SDK. Productivity is greatly improved since the customer does not develop a complete system but a small application compatible with MSX-AIRIS that meets his needs.

Feel free to reach us!

Data acquisition

- Native support for 2D cameras (UVC, GigE)
- Native support for 3D cameras (Intel Realsense)
- Automatic camera discovery
- Camera settings management
- Snapshots and video recording

Data management

- Data acquisition
- Data annotations and labelling

Artificial intelligence and processing

- Installation of custom ONNX models support with GPU acceleration for classification, detection and segmentation
- Designed to combine Deep Learning and 2D/3D vision processing

- Enables multi-camera processing
- Lightweight for embedded applications and real-time processing

Monitoring

- Secured and encrypted MQTT and OPC UA interfaces for datareporting
- Encrypted communication clients available for MLOps pipelines integration
- Easy to manage with embeded Web app and Android app
- Secure system authentication with privilege levels

Automation

- Compatible with ADDI-DATA MSX-E product family for industrial measurement and automation
- PLC control
- ROS (Robot Operating System)



Development tools

- Vision SDK (Python/C++)
- Standard computer vision Python packages integrated (OpenCV, Open3D, scikit-image...)

Uses cases

- Quality control
- Smart measurement
- Visual inspection
- Robot guidance
- Smart city

The appliance

For each specific use case, we choose the best hardware to embed MSX-AIRIS and provide a ready-to-use system. Contact us!

ARCHITECTURE DIAGRAM

