



Alliance for IoT
and Edge Computing
Innovation

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AIOTI
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AIOTI AWARD 2024

Identitas an AIoT-based solution for traceability and zero defect manufacturing

VIDEO SYSTEMS

Alessandro Liani

Background and Aims

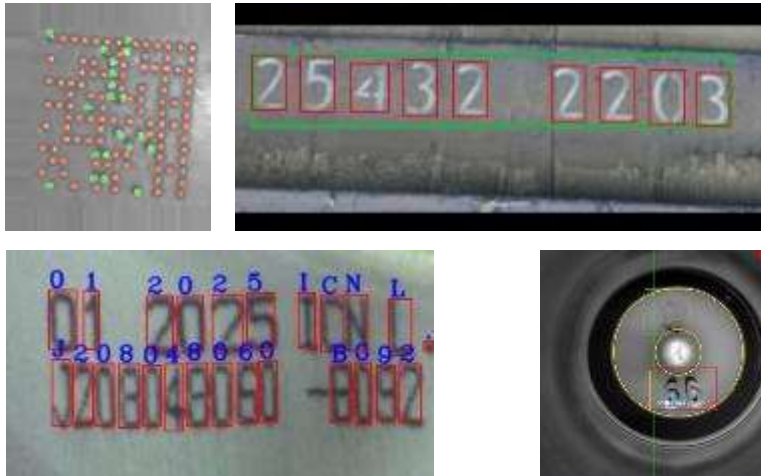
In the modern world, product traceability is essential to ensure consumer safety and process optimisation.



In the **manufacturing** world in particular, product traceability even within the factory is an essential element.

Challenges

One of the biggest challenges is to ensure product identification systems based on codes, RFID tags or other methods that guarantee security in identification.



ROI on investments for goods tracings and process monitoring

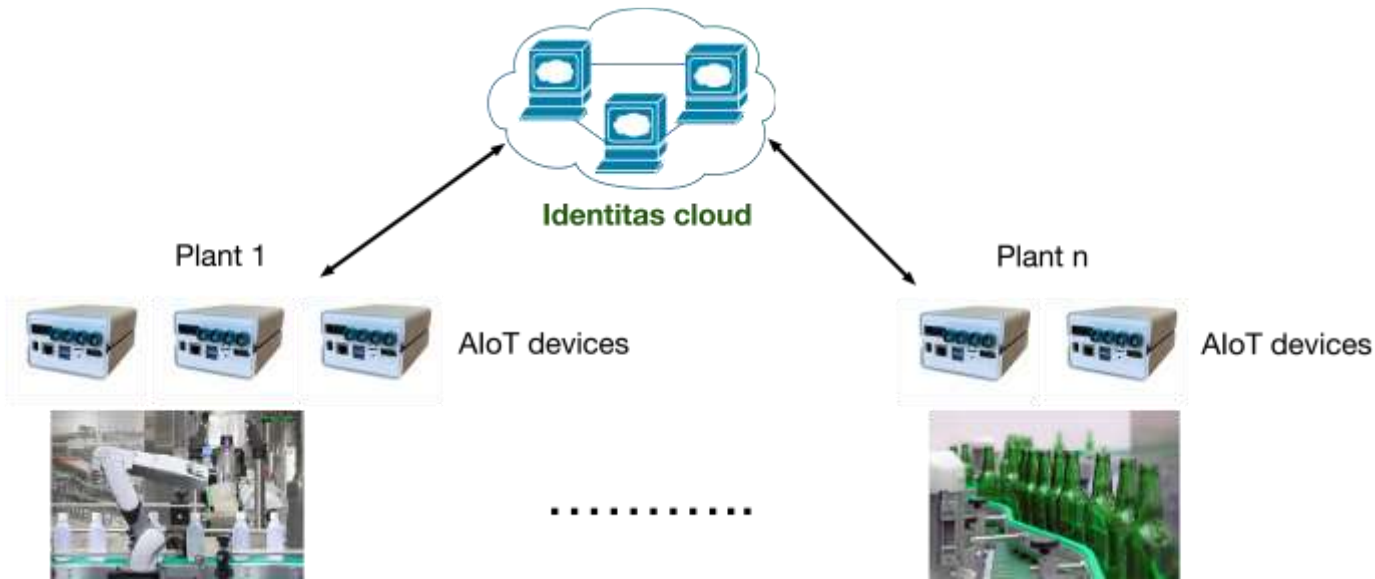


99.99%

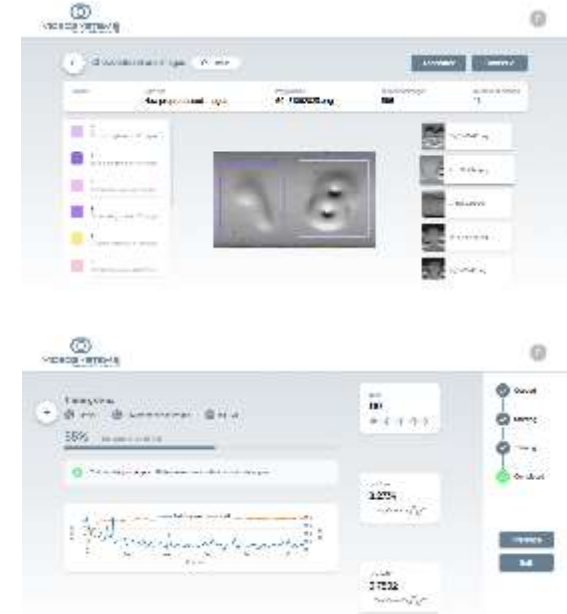
An high rate of correct reading ability, close to 100%.

Solutions

Identitas consisting of a cloud-based software solution and edge units with AI model analysis capabilities and IIoT connectivity.



The cloud platform is designed to offer (in SaaS model) tools for training **Identitas AI** models, collecting production data and analysing them.



Ingenium® edge devices are based on GPUs technology for a ready to use AIoT solution



Benefits or results

Identitas Key-points:

1. Dedicated dashboards
2. Edge image processing ensuring high reliability rates (typically over 99.7%)
3. Increased solution resilience due to distributed and non-centralised computing.
4. Statistical and survey data via IIoT infrastructure
5. Temporal data analysed by dedicated AI engines
6. Process patterns and anomalies identification
7. Easy to integrate on other solutions thanks to API



A real case

Case data

Industrial sector	Pharmaceutical
Production rate	+600 vials per minute
Number of video streaming managed (on edge)	6
Processed images per second	+60 fps
Reading reliability rate	99.82%

Conclusions

Identitas, powered by cutting-edge AI-based machine vision technologies, revolutionizes identification processes in challenging industrial settings, today is applied on:

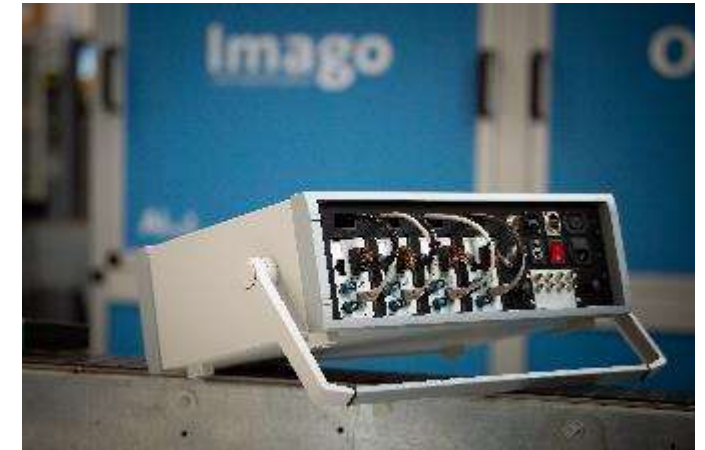
- Steel production
- Hollow glass production
- Pharmaceutical factories
- Food and beverage
- Aerospace production industries

Unlike traditional barcode readers, **Identitas** excels in deciphering codes and identifiers across various difficult scenarios. From reading punched codes on rough metallic surfaces to laser-targeted codes on glass, it navigates complexities effortlessly.



By harnessing AI's adaptability, **Identitas** ensures accuracy and efficiency where conventional methods falter.

With a strong focus on sustainability, **Identitas** emerges as a technology solution poised to elevate production process efficiency while enhancing product traceability.



Thank you

Alessandro Liani
a.liani@videosystems.it