

ALBIS® Automated Light Bar Inspection System

Runway lights inspection system



» Mission:

As air traffic continues to grow, airports need cutting-edge infrastructure to maintain the highest standards of efficiency and safety. ALBIS® is the ultimate solution for precise and smart runway light inspection, ensuring seamless operations with minimal disruption and reduced personnel requirements. Designed for reliability and performance, ALBIS® supports airports stay ahead in a fast-moving world.



Functionality:

ALBIS® features a central body extending into two aerodynamically profiled bars, each equipped with an array of advanced sensors. Equipped with an embedded LTE module, ALBIS® enables full remote control from anywhere and effortless installation on a wide range of vehicles, including UAS.

Engineered for precision, ALBIS® performs highly accurate measurements without distortions caused by movement. This is guaranteed by its RTOS (Real Time Operating System)-based architecture, which enables perfectly synchronized data acquisition from all sensors. ALBIS® has been developed in compliance with EASA and ICAO standards.

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Key benefits:

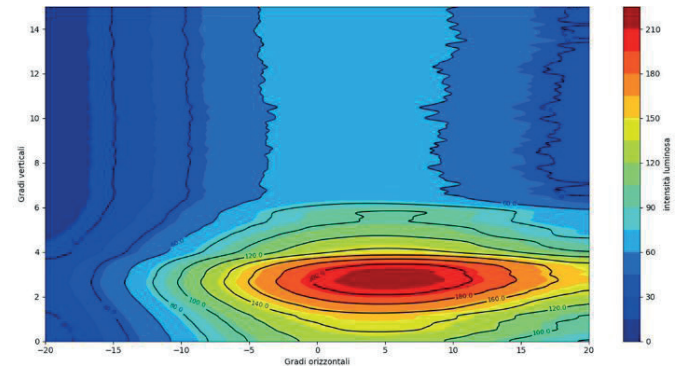
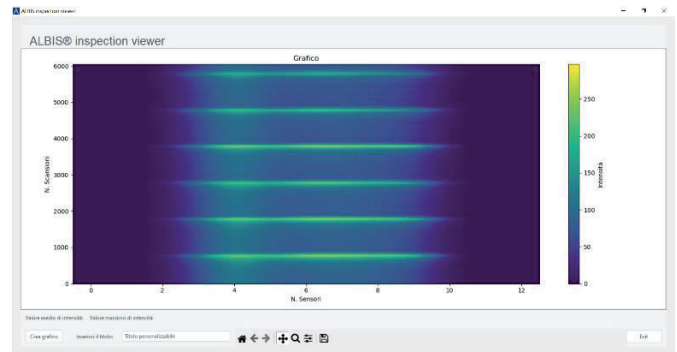
- Lower costs – Efficient technology that reduces operational expenses;
- Lightweight Design – Enables easy installation and deployment on UAS;
- Low Power Consumption – Optimized energy efficiency for extended use;
- Plug and play – Fast connection system for immediate use.

Main technical features and overview:

- Inspection of edge, threshold and centerline runway lights;
- Real-time data download for immediate access to acquired data;
- Photometric footprint reconstruction;
- Light health and position assessment.

Post-Processing:

Data can be analyzed in post-processing phase that involves the use of a dedicated HMI, specifically developed for ALBIS® system. The user can view the overall status of the entire lights array, and then inspect each one individually selecting the relevant area of interest. The light intensity level can be verified through a dedicated contour.



Connectivity:

- LTE embedded module

Technical Features:

- Equipped with 13 sensors;
- Dimensions: 140 cm (wingspan) x 20 cm (length) x 20 cm (height);
- Weight: 1,5 kg;
- 5V / 3A power input;
- 1,5 h operational autonomy;
- Option for standalone battery power supply;
- Sliding rail mounting system.

Regulations and Certifications:

- ALBIS® is CE certified in compliance with the following standards and regulations:
 - » EN 55032:2015 Electromagnetic compatibility of multimedia equipment - Emission Requirements;
 - » EN 55035:2015 Electromagnetic compatibility of multimedia equipment - Immunity Requirements.

