

LUXILAB™ – LAB IN A BOX VSWIR 500–1,700nm



INTELLIGENT HYPER SPECTRAL IMAGING

The LUXILAB™ system represents the next generation of intelligent hyperspectral imaging solutions. LUXILAB™ leverages hyperspectral imaging and deep-machine learning to deliver the accuracy of lab inspections, with real-time results in the field.

Hinalea's Luxilab™ system represents the next generation of intelligent hyperspectral imaging solutions, leveraging advanced hyperspectral imaging and deep machine learning to deliver the accuracy of lab based inspection techniques, with results delivered in real time.

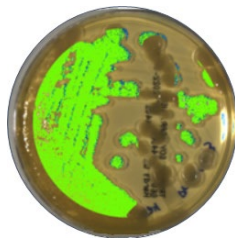
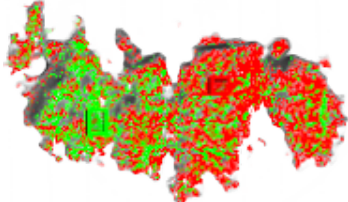
The problem: Existing lab-based inspection solutions require prolonged time to answer, are labor intensive, prone to human error, and often costly. Microbiological and chemical testing, while accurate, requires incubation and often takes days to yield results. These delays can often result in external supply chain quality failures with significant social costs.

The answer: Hinalea's Luxilab system offers a fast, accurate, cost-efficient and easy-to-use point of detection solution. The Luxilab hyperspectral imaging system generates rich spectral and spatial data on a given target, which is then converted to real time actionable intelligence through machine learning algorithms. The Luxilab algorithms are developed using existing inspections standards as the basis of ground truthing and certified independently where required. The Luxilab system is fully-portable, allowing users to bring testing into the field, whether that is a production facility, farm or port, providing accurate inspection in real time. Our system automates complex inspection processes and brings lab-based systems to the point of production.

Current applications:

The Luxilab system is industry agnostic and can be used in a variety of applications, from measuring the quality and freshness of foods, to analyzing for the presence of toxins and other environmental or safety applications. Sample applications include:

- Mycotoxin detection
- Microbial classification
- Acrylamide detection
- Fooding grading and freshness



The material in this document is accurate at time of publication. Hinalea Imaging reserves the right to modify this information as it incrementally improves the product.

Contact us!
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LUXILAB™ TECHNICAL SPECIFICATIONS

MECHANICAL

Dimensions (LxWxH)	5" x 12" x 11"
Weight (Mass)	3.94 kg

ELECTRICAL

Input voltage	110 VAC at 60Hz / 220 VAC at 50Hz
Data interfaces	USB2.0, USB Micro, Gigabit Ethernet/IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE)

ENVIRONMENTAL

Operating temperature	15° to 35° C
Humidity	65% non-condensing

SCAN PERFORMANCE

Field of view	10 cm at sample stage
Sensor spatial resolution	1.34 MP
Spectral range	500-1,700 nm
Spectral bands	300 nominal
Spectral resolution	15 nm (FWHM)
Cooling	Integrated
Illumination	Integrated Halogen



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