



HYPERA

DISRUPTIVE DETECTION TECHNOLOGY

Lab2Line.

DATASHEET

CHEMICAL SIGHT TO EXTEND ARTIFICIAL VISION BEYOND COLOURS: QUANTITATIVE COMPOSITION WITH SPATIAL RESOLUTION



DESCRIPTION:

In-line Hyperspectral Imaging (HSI) Analyser for spatial quality monitoring, based on Near Infrared (NIR) technology.

A high-precision chemical imaging system for real-time monitoring of product quality with spatial information.

MAIN CHARACTERISTICS:

- Ideal for visualizing defects that are not visible for the human eye nor for artificial vision cameras
- For quantification of chemical or physical parameters with spatial information
- Easily combined with alarm and sorting systems
- Designed for industrial environments



TECHNICAL SPECIFICATIONS:

	CAMERA 1	CAMERA 2	CAMERA 3
Acquisition geometry	Reflectance	Reflectance	Transmittance
Spectral range	SWIR (900-1700 nm)	Vis-NIR (400-1000 nm)	Application-dependent
Number of spectral channels	168	270	1
Number of pixels/line	320	640	2048 Pixels
Acquisition speed	420 Hz	485 Hz	50 fps
Illumination system	Halogen lights	Halogen lights	Narrow-band solid-state source

Hypera is delivered as a turnkey solution totally integrated in the line. It comprises a dedicated lighting system, IP65 housing, an industrial-grade high-speed computer and a proprietary software for processing the hypercubes according to bespoke chemometric models.

APPLICATIONS



FOOD

Detection of foreign bodies and foreign matter



Insects



Glass



Plastics
/ Teflon



Chewing
Gum



Cigarette
Butts



Stones
/ Sands



Nutshells



Fruit Pits



PHARMA

- Control of API and spatial homogeneity and content in solid forms



Pills



Tablets



Patches



CHEMICAL

- Control of Polymer Composition and Surface Properties for Product Homogeneity
- Sorting and Recycling



Ceramics



Tyres



Mining



Crystal



Chemical



Plastic

