

# INDUSTRIAL NIR ANALYSER

LAB2LINE





### DESCRIPTION:

Industrial NIR analyser for real-time and continuous chemical composition monitoring adapted to diverse geometries and unit operations (conveyor belts, pipes, tank, etc.) and unit process machinery (e.g. blenders).



# MAIN CHARACTERISTICS:

- → Continuous monitoring of Quality Attributes (CQAs) ensuring the measurement of all product units and guaranteeing their standardisation.
- → Real-time and simultaneous measurement of Critical Control Parameters (CCPs) for keeping the production process under control.
- → Anomaly Detection: Early warning in the event of unexpected changes in the product's composition.



# VISUM

- → Fraud detection
- → Fat, moisture and protein content
- → Water and protein content monitoring in milk
- → Routine quality control of edible oils
- → Total acidity and polar compounds concentration in frying oil
- → Routine quality control of edible oils by-products: water-in oil, water-in-marc.





#### PHARMA

- → API content uniformity
- → Blending and drying end-point determination



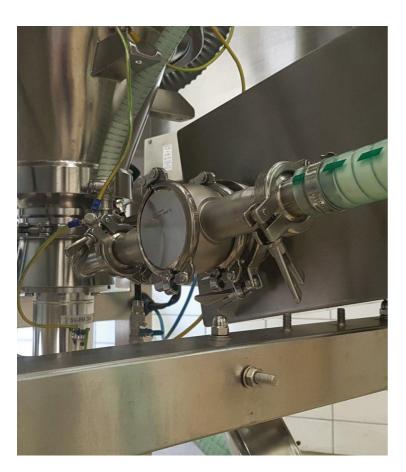
## OTHER INDUSTRIES

- $\rightarrow$  Polymer identification
- → Black plastic coated with an inorganic compound classification
- → Ethanol & sugar concentration monitoring during fermentation process

7100KA

# TECHNICAL SPECIFICATIONS

SENSOR	InGaAs photodiode array
SPECTRAL RANGE	900 – 1700 nm
SPECTRUM ACQUISITION TIME	10 ms
SPECTRAL RESOLUTION	3 nm
ACQUISITION GEOMETRY	Diffuse reflectance, interactance and trasflectance
WEIGHT	14 kg
DIMENSIONS	325 x 243 x 240 mm3
INGRESS PROTECTION	IP65
POWER SUPPLY FOR CHARGING THE BATTERY IN THE DOCK STATION	230 VAC (1-phase). Consumption < 100 W
MATERIAL (ENCLOSURE)	AISI 304
LIGHT SOURCE LIFETIME	1 year (standard use)
BUILT-IN COMPUTER	A7 Dual-Core ARM®
USER INTERFACE	External-PC-based (for configuration and service tasks)
DATA OUTPUT	Profibus DP RS485
OPERATION MODE	Slave / Continuous
CONNECTION TO THE PROCESS	Insertion flange for Varinline (R) Type N Housing from OD 11/2" to OD 3" (DN40 to DN80) pipe diameter
MAX PRESSURE ON THE WINDOW (PROCESS SIDE)	16 bar
MATERIALS (INTERFACE WITH THE PROCESS)	Borosilicate glass and AISI 316L steel
SOFTWARE	VISUM®
CONNECTIVITY	PLC, SCADA, ERP





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