

# NEAR-IR FOURIER ANALYZER

## InfraLUM FT-10



### METHOD

Near-IR Fourier spectroscopy.

### PRINCIPLE OF OPERATION

Is based on analysis of the composition and properties of a sample using its near - IR Fourier absorbance spectrum

### FEATURES AND BENEFITS

- Simultaneous fast non-destructive determination of multiple parameters of interest
- High photometric accuracy
- Most of the samples are analyzed without grinding
- Turnkey application calibration models are provided
- No reagents and consumables are needed, no sample preparation
- Easy to operate



**APPLICATION EXAMPLES**

<b>Qualitative analysis</b>	
	Authentication (quality assurance of source materials and products)
	Identification (attributing a sample to a certain known type)
<b>Quantitative analysis</b>	
Wheat grains	Gluten, moisture, protein, fat, ash, glassiness
Wheat flour	Gluten, moisture, protein, fat, ash, whiteness
Rye grains	Moisture
Rye flour	Moisture, ash, grain size
Brew-grade barley	Protein, extractivity, filmness, grain hardness, moisture
Corn	Protein, fat, sugar, starch, moisture
Soya beans and flour	Protein, fat, moisture
Dry milk	Protein, fat, fiber, moisture
Mixed fodder	Raw protein, moisture, raw fat, raw ash, phosphorus content, calcium content, fiber, acidity, metabolic energy
Wheat, barley, oats, sunflower meal, sunflower cake, meat flour	Raw protein, moisture, raw fat, raw ash, phosphorus content, calcium content, fiber, metabolic energy
Fish flour	Raw protein, moisture, raw fat, raw ash, phosphorus content, calcium content, metabolic energy
Cellulose	Hardness, whiteness, moisture
Curds	Protein, fat, acidity, ash, moisture

**EQUIPMENT AND OPTIONS**

- InfraLUM FT-10 NIR Fourier analyzer with SpectraLUM/Pro software package
- Set of measuring cells and calibration databases (in accordance with a list of parameters of interest)

**SPECIFICATIONS**

Spectral range	800 – 1163 nm (12500 – 8600 cm <sup>-1</sup> )
Resolution	0,8 – 1,6 nm
Typical spectrum measuring time	2 – 3 min
Cell	from 1.5 to 27 mm
Power requirements	110 / 220 Vac, 60/50 Hz
Power consumption	110 W
Size	580x515x295 mm
Weight	37 kg



**WARRANTY**

All LUMEX equipment is covered by a 12-month warranty.

**SERVICES**

Calibration models can be adopted to the customer set of samples or new calibration models can be developed upon customer request. Installation and commissioning of LUMEX instruments are provided by our engineer. On-site training for personnel in basic operation procedures using the customer samples may be provided. Free replacement of parts under warranty and repair of the instruments are provided within the warranty period.

The information and specifications in this publication are subject to change without notice.

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