

Infralum FT-12



FT-NIR Express analyzer



InfraLUM FT-12 FT-NIR analyzer is designed for express and precise analysis of various agricultural and food products, enabling simultaneous determination of key parameters with utmost accuracy. With fast, one-minute analysis and typically no need for sample preparation, the instrument offers both efficiency and ease of use.

Compared to common wet-chemistry techniques, this universal instrument significantly reduces analysis cost. The analysis is environmentally friendly, generating no waste or pollution, and allows all necessary parameters to be measured in one run.

FEATURES AND ADVANTAGES

- Simultaneous determination of all parameters of interest within 1 minute
- Highest accuracy of results provided by the use of Fourier transform NIR spectrometry
- Transmission spectrum which is more informative compared to the reflectance spectrum
- Whole grain analysis with no sample preparation: no milling or grinding
- No reagents or consumables required
- Waterproof and dustproof optical compartment of the interferometer
- Open calibration models (the possibility of extending existing calibrations)
- Dedicated user-friendly SpectraLUM/PRO software compliant with FDA 21 CFR part 11
- IQ/OQ protocols

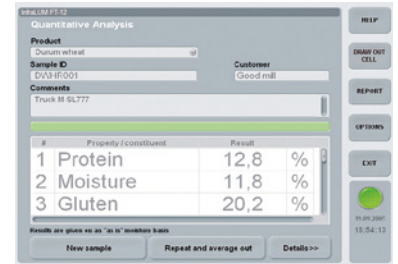
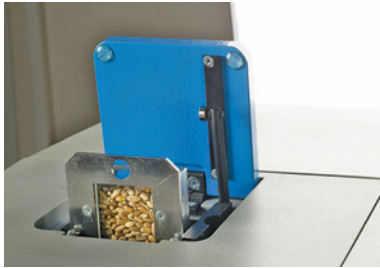
THE MAIN APPLICATION AREAS

- Rapid analysis of quality parameters (protein, moisture, gluten, etc.) of cereals (wheat, barley, corn, etc.)
- Monitoring of flour quality at all stages of the milling process
- Control of quality parameters of:
 - milk and milk products (cheese, curd, yoghurt, milk powder, and others);
 - vegetable oils, oilseeds;
 - meat and meat products;
 - fish and seafood;
 - vegetables and fruits;
 - feed, and mixed fodders, and raw ingredients for feed production;
 - wines, etc.

Lumex Instruments offers a range of models of InfraLUM FT-12 NIR analyzer to suit different needs:

- **InfraLUM FT-12** universal model ideal for routine laboratory testing of any sample types;
- **InfraLUM FT-12 Industrial** model tailored for industrial use at processing sites. It is highly recommended for liquid and paste samples analysis, and for use in industrial environments with vibrations, unstable power supply, or frequent analyzer relocation;
- **InfraLUM FT-12 WholeGrain** model equipped with the automatic cell-filling system for the rapid analysis of whole grains cereals.

OPERATION WITH THE INSTRUMENT



1. Fill the sample cell, place it into InfraLUM FT-12 / FT-12 Industrial or fill the grain into the shaft of InfraLUM FT-12 WholeGrain, choose the analyzed product in the menu, and start the measurement.

Result obtained in 1 minute.

SPECIFICATIONS

	InfraLUM FT-12	InfraLUM FT-12 Industrial	InfraLUM FT-12 WholeGrain
Analysis time	1 min		
Sample volume	3-60 ml	3-60 ml	500 ml
Spectral range	13200-8700 cm ⁻¹ (760-1150 nm)		
Resolution	8, 16, 32, 64 cm ⁻¹		
Power supply	90-260 VAC (48-62 Hz), 110 W		
Dimensions / weight	530×450×380 mm / 32 kg	530×450×420 mm / 35 kg	530×485×495 mm / 32 kg
Features	Universal model for all types of samples	Autosampler protection with stainless steel parts Automatic locking system Antivibration platform PLC (optional)	Automatic cell filling for whole grain cereals analysis

SERVICES

Installation and commissioning of Lumex Instruments' NIR analyzers can be carried out at a customer site by our service engineers or by certified distributor service engineers.

WARRANTY

InfraLUM FT-12 analyzer is covered by a full 1-year warranty.



Find your local Lumex Instruments distributor:
www.lumexinstruments.com | sales@lumexinstruments.com