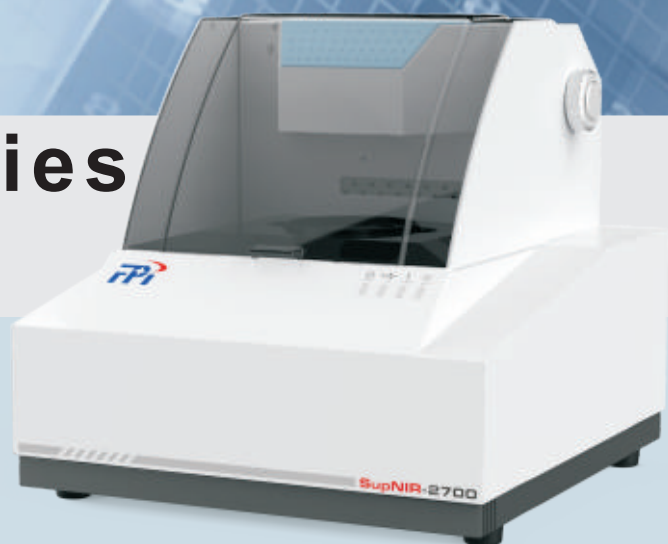


SupNIR-2700 Series

Fast and nondestructive analysis
for grain/oil/feed



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Introduction

FPI's SupNIR-2700 series near infrared analyzer is designed to meet customers' demand of accurate and rapid analysis of grain, oil and feed for quality control and pricing. It requires minimal operator training and instrument maintenance. Analysis takes less than a minute and no chemicals are required. Operation is very simple, just pour the sample into the dish, place under the instrument, and automatic analysis will be done within a click.

The user-friendly RIMP software combines instrument control, data analysis and modeling in one. It is connected to the dynamic link libraries, thus ideal for data output and office automation. Report forms can be customized according to customer's demand. With the existing analysis model, the analyzer performs accurate analysis for quality control of raw material and finished products in solid grains, pellets, pastes and powders.

Specification

Wavelength range	1000~1800nm, SupNIR-2720
	1000~2500nm, SupNIR-2750
Noise	Less than 5×10^{-5} A
Wavelength accuracy	± 0.2 nm
Wavelength repeatability	Less than 0.01nm
Stray light	Less than 0.1%
Resolution	10.95 ± 0.3 nm@1395.5nm
Analysis time	Less than 60s
Simultaneous analysis	No limit
Sample size	Less than 120g
Lamp life-time	More than 5000 hours
Communication ports	USB 2.0
Temperature	(5~35) $^{\circ}$ C
Humidity	(5~85)%
Power supply	(198 ~ 242)V~/50Hz/0.5A
Dimension(L×W×H)	403 x 391 x 374mm
Weight	Approx. 20kg



Features and Benefits



Rotary Sample plate leads to accurate analysis

Effective sample analysis

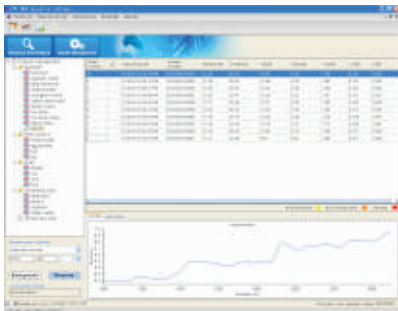
- Optimize sample presentation while minimize operator influence
- No sample preparation required for most products and sample data integrity ensured
- Perform real-time analysis for solid grains, pellets, pastes and powders
- Rotation measurement ensures representativeness for heterogeneous samples



Light source easy to replace

Hassle-Free Maintenance

- Easy to clean sample plate
- Long operating time, and light source easy to replace
- Convenient routine maintenance and model update



Simple to operate RIMP software

High performance RIMP software

- Easy and reliable software operation ensures stable analysis result
- One software for operation and modeling
- Online data analysis and multiple statistics functions
- Customizable reports output

Robust design and high reliability

- Adopt advanced raster scanning technology and InGaAs detector
- Perform multi-component analysis in less than 1 min
- Daily self-check and automatic alarm display
- Reliable instrument stability and less instrument noise
- No adjustment needed for light source.
- Transferable calibration, ideal for use in a network of instruments
- Improved water resistance and dustproof properties, suitable for factory environment

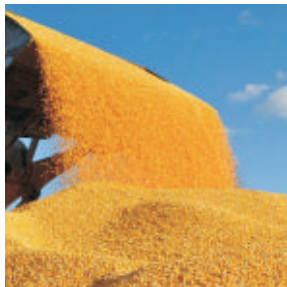
Applications

Feed

SupNIR-2700 series provides rapid and reliable analysis on raw material to optimize feed formulation, improve product quality and minimize cost. And inspection on finished product is essential for pricing.

Sample source	Sample type	Parameter
Feed (raw material)	Fish meal	Moisture, protein, ash, calcium, phosphorus, acid value, salinity, amino acid
	DDGS	Moisture, protein, fat, fiber, ash, calcium, phosphorus
	Corn germ meal	Moisture, protein, fat, fiber, ash
	Wheat bran	Moisture, protein, ash
	Meat powder	Moisture, protein, fat, ash, amino acid
	Manioc	Moisture, protein, ash,
	Brewer grain	Moisture, protein, fat, fiber
	Shrimp shell meal	Moisture, protein, ash
Feed (finished product)	Batch mixture for pig	Moisture, protein, fat, ash content, calcium, phosphorus
	Batch mixture for hens and ducks (produce egg)	Moisture, protein, fat, ash, calcium, phosphorus
	Batch mixture for hens and ducks (produce meat)	Moisture, protein, fat, fiber, ash, calcium, phosphorus, salinity
	Batch mixture for fish	Moisture, protein, fat, ash, calcium, phosphorus

Note: Contact FPI for samples not in the list.



Raw material



Manufacturing



Finished product

Applications

Oil

SupNIR-2700 series is widely used in determination of oil and grease products as well as oil seeds quality for pricing, optimizing manufacturing process and inspecting product quality. And it brings huge economic benefits for factories.

Sample source	Sample type	Parameter
Oil	Soybean	Moisture, protein, fat
	Bean pulp	Moisture, protein, fat, fiber, ash, protein dissolution, amino acid
	Rapeseed	Moisture, protein, fat, erucic acid, thioglycoside, palmitic acid, stearic acid, linoleic acid, oleic acid
	Rapeseed meal	Moisture, protein, fat, fiber, ash, protein dissolution
	Cottonseed	Moisture, protein, fat
	Cottonseed meal	Moisture, protein, fat, fiber, ash
	Peanut meal	Moisture, protein, fat, ash
	Sesame meal	Moisture, protein
	Rice bran	Moisture, protein, fat, fiber, ash, acid value
	Rice bran meal	Moisture, protein, ash

Note: Contact FPI for samples not in the list.



Raw material



Manufacturing



Finished product

Grain

Grain detection with SupNIR-2700 can be employed in quality control from raw material to the finished product. It helps to save money, improve process efficiency and increase factory throughputs.

Sample source	Sample type	Parameter
Grain	Wheat	Moisture, protein, fat, fiber, ash, Zeleny sedimentation value, wet gluten
	Flour	Moisture, protein, ash
	Corn	Moisture, protein, fat, fiber, ash, starch, phosphorus, amino acid
	Milled rice	Moisture, protein, amylose, eating quality

Note: Contact FPI for samples not in the list.



Raw material



Manufacturing



Finished product

Smarter Tech Greener World



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