

# HIGH-PERFORMANCE FT-NIR FOR FOOD AND FEED ANALYSIS



**FT 9700**  
Full-Wavelength-Range  
FT-NIR Spectrometer

# ENSURE PRODUCT QUALITY WITH ACCURATE AND RELIABLE ANALYSIS

FT 9700

From field to lab to loading dock, it's the perfect FT-NIR for samples of all shapes and sizes

Food laboratories across the globe need quick, accurate, reliable analyses to monitor the quality of products and incoming raw materials. Introducing the PerkinElmer FT 9700™ – the compact, high-performance full-wavelength-range FT-NIR spectrometer suited for a wide array of applications and samples in the food and animal-feed industry.

With advanced technical design and fully integrated, robust universal sampling for trouble-free measurements, the FT 9700 system is ideal for food laboratories that need to quickly analyze the quality of ingredients and finished goods to reduce



variations in production. This robust instrument with a simple, intuitive touchscreen interface makes it easy to use for seasoned scientists and novices alike.

The FT 9700 system also delivers operational simplicity and combines superb performance with a low-maintenance design, enabling true laboratory-performance NIR for everyday analysis. It's a complete solution, providing an exceptionally fast way to ensure the quality of materials, regardless of application. For confidence in your results – *every day* – choose the FT 9700 FT-NIR system.

## TECHNOLOGY THAT BUILDS ON WHAT WORKS

Based on tested, proven IR technology, our FT 9700 system delivers all the features and functionality you've come to expect from the industry leader in IR. It provides exceptional spectra for a variety of everyday applications, superior signal-to-noise ratio, and advanced electronics and sensitivity. And with its robust, portable design and incomparable ease-of-use features, it can be deployed wherever it's needed most.

### Innovative rotary interferometer

Eliminating dynamic alignment for reliable service over time

With our **Dynascan™** fixed-mirror-pair interferometer design, the system doesn't need to perform dynamic alignment to compensate for errors found in linear-mirror-movement systems. Our field-tested and proven interferometer technology incorporates a simple, noncritical bearing for reliable service over the life of the instrument.

### Compact, robust enclosure

Protecting your optics to ensure maximum instrument uptime

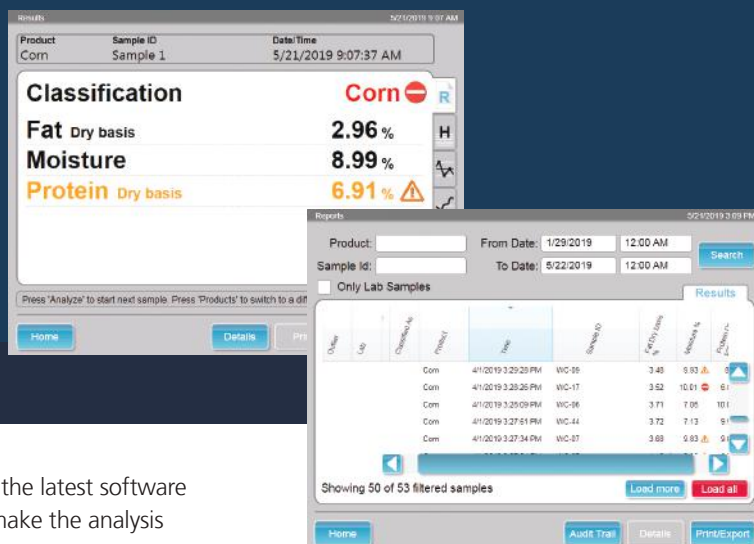
Our **OpticsGuard™** technology provides a protective humidity barrier that shields the FT 9700 system from environmental effects and enables the system to be used under inhospitable working environments. And the long-life desiccant allows for maximum instrument uptime – even under the harshest conditions.

### Unique standardization technology

Data accuracy from instrument to instrument

With our **Absolute Virtual Instrument™** technology, standardization using gas-phase spectra ensures your instruments are accurately calibrated, while an instrument's wavenumber and line shape are standardized more precisely than with conventional methods. With AVI, data can be transferred accurately among instruments, wherever they reside.

# FOCUS ON WHAT MATTERS MOST: YOUR RESULTS



Simple, modern, intuitive, and productive – Results Plus is the latest software platform that offers a touchscreen interface designed to make the analysis workflow quick and easy.

## Simple

Results Plus software utilizes three modes of operation: Analysis, Setup, and Reporting.

Analysis mode lets you analyze a sample with the FT 9700 system and receive predicted results. Setup mode controls the calibrations and products used on the instrument, as well as setting different hardware and software options for the FT 9700 system and Results Plus software. Reporting mode lets you review the predicted results after analysis, input lab reference data into a specific sample, and export or print the data in various formats.

To analyze a sample, simply touch the desired products. You'll be able to input a sample ID, supplier information, and much more.

## Modern

The Analysis screen functions as an anchor point during the analysis process. Various windows open at specific points during the analysis process to facilitate sample information registration (sample ID and/or additional text fields). Various tabs allow you to quickly access detailed information without cluttering the screen.

## Intuitive

The History View tab lets you quickly see previous sample results for the current product. Any samples listed can display additional information when you select the sample and press the Details button.

## Productive

The Results Graph tab of the Results screen displays a graph of previous sample results, organized by individual parameter. If any user-defined specification limits have been set, the graph will contain lines representing those limits. To view other parameters, use the blue left and right arrows next to the current parameter name.

## SPECIFICATIONS

Wavelength range	700 nm to 2500 nm
Analysis time	< 25 sec
Operating temperature range	5 °C to 45 °C
Detector	Indium Gallium Arsenide (InGaAs)
Wavelength accuracy	0.028 nm at 1670 nm
Wavelength repeatability	Better than 0.004 nm at 1390 nm
Dimensions	550 mm (H) x 460 mm (W) x 410 mm (D) (including touchscreen)
Display	12-in. color touch screen
Interface	Four USB ports and one Ethernet
Power requirements	240/115 VAC, 1.5 A
Net weight	26 kg

## The path to lab efficiency starts here

In today's complex laboratory environments, every function has to work in sync toward the common goal: lab efficiency in the service of scientific discovery and progress. And that's the overarching goal of OneSource®



Laboratory Services, too. We deliver solutions that cover all aspects of scientific lab operations and can be customized for the scientific workflows – and business outcomes – you're driving toward.

Simply put, OneSource is the one service organization with the requisite understanding of lab and R&D needs, delivering a customized systems approach to your success. With a full measure of insight and expertise, our consultants can pinpoint the issues and inefficiencies and engineer the right solutions to solve your scientific and business challenges.

From everyday instrument repair and service to compliance and validation, from laboratory IT service to method development services and scientific staffing, OneSource Laboratory Services can help streamline your lab routines and get your scientists back to their main order of business – science.

## A LONG HISTORY OF IR LEADERSHIP

Since 1944, when we introduced the first IR spectrometer, we've been at the vanguard of IR innovation. Now, we bring that deep-seated experience to a new generation of IR systems that's up to any challenge. So whatever your industry, we have a system that meets or exceeds your exacting standards.

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