

EXCEPTIONAL NIR PERFORMANCE



DA 7250™
Diode Array NIR Analysis System





SAVE TIME IN THE LAB
AND IN THE PROCESS



6-SEC ANALYSIS – NO CLEANING
BETWEEN SAMPLES

Maximize your productivity with high-performance NIR analysis

Food and agricultural processors across the globe can now quickly and accurately determine key components of raw materials, process samples, and finished products to ensure quality, optimize manufacturing processes, and maximize profits.

The PerkinElmer **DA 7250™** is a fast, accurate, easy-to-use and versatile near-infrared (NIR) analyzer designed for use in laboratory as well as in-process environments. Years of experience and expertise have guided its intuitive design to provide a seamless and simplified interaction.

The instrument is available in two variants – one for general use and one sanitary design version for use in the food industry.



Analysis Features

- 6-second analysis of all types of samples
- Touch screen operation with intuitive software
- Unique performance on unground or inhomogeneous samples
- Easy sample handling without need to clean cups between analyses



MOISTURE, PROTEIN, FAT, FIBER,
STARCH, ASH, SOLIDS, AND MORE



RAW MATERIALS, PROCESS SAMPLES,
AND END PRODUCTS

Designed and calibrated for your applications

The DA 7250 is versatile and ideal for a wide range of applications. We offer ready-to-use calibrations for most applications, and our team of experts are ready to support you with updates and enhancements over time. These are some examples of applications:

Feed millers can analyze raw materials, in-process samples, and finished products for parameters such as moisture, protein, fat, ash, starch, and fibers – all without having to grind samples.

Grain processors can benefit from the DA 7250's speed, versatility, and rugged IP 65 rating. Flour millers can measure grains, middlings, and various flour streams. Starch or ethanol producers can analyze incoming grains, fermentations samples, and various co- and final products.

Oilseed processors can measure moisture, fat, fatty acids, protein, fiber, and more in seeds, press cakes, flakes, meals, and oils. Test seeds at intake to pay the right price and analyze production samples to optimize extraction, drying, and blending.

Seed researchers benefit from the ability to both analyze small breeder grain or oilseed samples as well as larger samples with inhomogeneity on the same instrument.

Sugar processors can measure incoming sugar beets or sugar canes as well as process intermediates for parameters such as polarization, brix, and moisture.

Dairy processors find the DA 7250 ideal for providing knowledge to optimize production and improve end-products consistency. Cheese, butter, yogurt, powders, and more can be measured without need for time consuming sample cup clean up.

Pet food manufacturers can quickly measure ingredients, wet and dry pet food samples with minimum sample preparation and clean up.

Processed foods producers of snack foods, pasta, confectionary, and potato products benefit from the DA 7250's speed and ability to accurately measure unground samples.

Meat processors can determine fat, moisture, protein, collagen, salt, and more in raw meats, in-process samples, and finished meat products.

Rendering and other feed ingredient operations can analyze animal meals such as meat and bone meal or fish meal to ensure consistent final products and reduce raw material costs.





EASY TO USE – OPEN DISH ANALYSIS



ROBUST AND NO MOVING COMPONENTS IN SPECTROMETER

Technology that delivers

Robust, reliable, and high-performing diode array technology improves accuracy and long-term stability. The rugged design increases up-time and reduces cost of ownership.

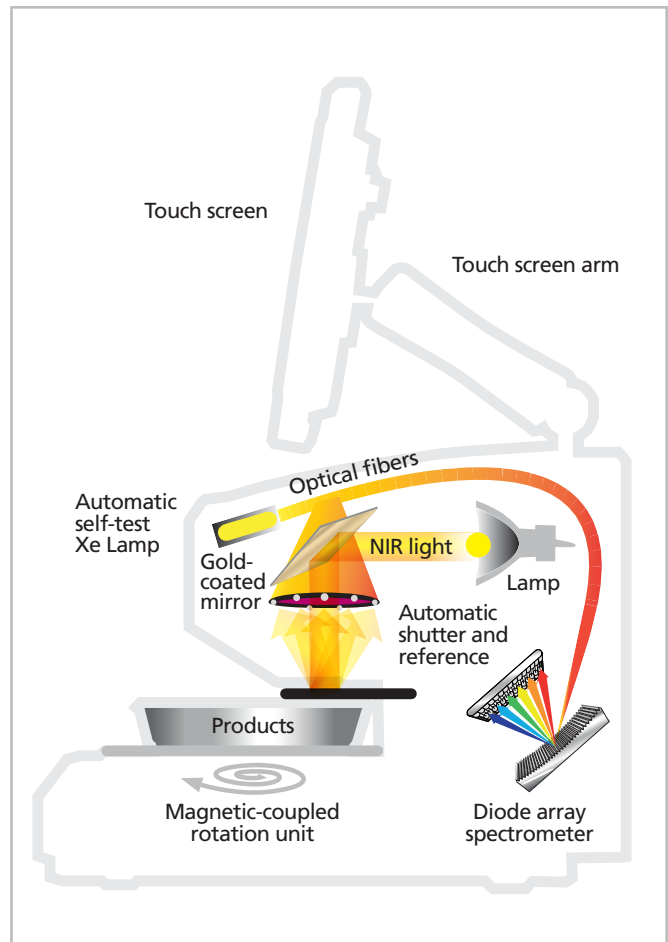
The optical design, including the rotating large sample dish, is particularly suitable when measuring uneven, poorly mixed products, pellets, grains, and granules. The top-down measurement minimizes any clean-up requirements between samples.

The instrument is equipped with advanced automatic standardizations of the wavelength and absorbance scales. This improves accuracy, corrects for changes in ambient conditions, and alerts users to potential problems.

The automated wavelength correction and the built-in reference measurements improve not only long-term stability, but also enhance instrument-to-instrument transferability of calibrations.

Advanced technology delivers an easy-to-use instrument for the operator and reliable, reproducible results. The DA 7250 is ISO 12099 compliant to ensure analyses meet international standards.

- IP-65 certified for use in dusty environments and to withstand rinse down
- Ready-to-use advanced ANN and Honigs Regression™ calibrations
- Powerful yet easy-to-use software with multiple data connectivity options
- Easy calibration transfer to and from our in-process instruments





AT-LINE PLACEMENT



RESULTS 24/7 WITH NETPLUS

Anything, anywhere, anyone, and anytime

Flexibility to Analyze Anything

Grains, powders, pellets, pastes, slurries, and liquids – nearly any type of sample – can be analyzed on the DA 7250, with no requirement for expensive, cumbersome modules. A large, representative sample area is analyzed, eliminating the need for sample preparation, saving time and effort. Available factory calibrations cover a wide variety of products and parameters and are built from our global database, which encompasses hundreds of thousands of samples.

Easy Operation by Anyone

From plant personnel to experienced chemists, all find the DA 7250 easy-to-use yet powerful. Its large touch screen with intuitive user interface and straightforward sample handling ensure rapid operator confidence. Operating procedures are designed to eliminate sources of operator error and produce accurate results regardless as to who performs the analyses. Accurate analysis is always available, enabling you to optimize and verify product quality 24/7, improving efficiency and reducing scrap.

Convenience to Analyze Anywhere

The DA 7250 can be used in the processing environment at-line as well as in the laboratory. The dustproof and waterproof IP-65 rated instrument can be hosed down and cleaned thoroughly thanks to the easy-to-clean design.

It is available in two models:

A general purpose (GP) model is suitable for dry applications and a dedicated sanitary design (SD) version is aimed at food production areas. Both models feature an open analysis area without visible driving mechanisms, making cleaning very easy.

Access to Results Anytime

The DA 7250 is fast. With an optimized workflow and little-to-no sample preparation, test samples anytime in just a few seconds. Samples can essentially be analyzed in real time, and results are available online, 24/7 with NetPlus Reports software.



The DA 7250: convenience to analyze anywhere

Accessories

Most types of samples – powders, meals, granules and grains, pellets, slurries, pastes and liquids, can be analysed with little or no sample preparation thanks to a wide range of sample cups. Changing sample dish types is quick and automatically prompted on the screen.

Large sample dish: Standard rotating sample dish with magnetic drive, made of durable plastic, (for most sample types). Large sample area for accurate, representative results.

Small sample dish: Small samples are measured using smaller sample cups when large sample volumes are hard to come by, (e.g., during breadmaking or research). To achieve representative measurements, the small sample dish will rotate.

Disposable cup: Analyze slurries, butter, pastes, molasses, and other difficult sample types with minimal handling and no clean up.

Transflectance cup: Used when measuring oils. The cup has a gold layer underneath and its teflon surface is easy to wipe clean between samples.

Micro-mirror module: With a unique design, this is the ideal way to measure very small samples (i.e., only a few grains).



Connected in lab and process

Bench-top and Process Instruments Built on a Common Technology Platform

Diode array technology, with the fast measurement and solid-state design, is particularly suitable to measure a product or sample when it is moving. The PerkinElmer DA 7350 in-line and DA 7440 on-line series are based on same NIR technology as the DA 7250. The common technology platform makes calibration transfer between the instruments easy and straight forward. You may develop a calibration offline where it is easier to run a wide range of samples, and then move the calibration seamlessly online to get accurate results quickly.

Connectivity

The **DA 7250** instrument and software platform are designed for optimal connectivity and data is readily exchanged with other programs. Ethernet TCP/IP and USB ports are provided and Windows peripherals such as a Wi-Fi dongles, cellular/mobile modem, barcode readers, and printers are supported. The instrument can be remotely administered through NetPlus or Team Viewer.

Web Interface Reporting and Instrument Management

The **DA 7250** is supported by the NetPlus web-based cloud solution. Instruments are connected through a local network or internet and can be accessed from anywhere through a web browser interface. NetPlus Reports provides access to analysis results and lets you monitor production or quality and provides the latest analysis results in graphs or charts. Monitor production, verify quality of ingredient shipments, or get an update on the latest analyses. NetPlus Remote lets you configure instruments, monitor performance, and update calibrations. Whether you manage one instrument or a NIR network of a hundred instruments, NetPlus Remote streamlines your tasks.



DA 7440 On-line NIR



DA 7350 In-line NIR



DA 7250 SD At-line NIR

Our expertise at your service

For more than 70 years, PerkinElmer has been providing leading spectroscopy instrumentation and dedicated NIR analyzers for the food, feed, and agricultural industries. With NIR specialist teams around the globe, we're ready to support you with pre-developed and custom calibrations.

OneSource® Laboratory Services comprises the most comprehensive portfolio of professional laboratory support offerings in the business, including complete care programs for nearly any technology and manufacturer. That means thousands of certified technicians in the field who are familiar with all the techniques you employ. Expect more from your instrument service provider and discover our comprehensive set of tools to help empower your analytical solutions and drive your business.



SPECIFICATIONS	
Analysis time	6 seconds
Measurement mode	Down view reflection or transmittance
Sample types	Unground grains and pellets, powders, pastes, slurries, liquids and more
Sample area analyzed	Up to 108 cm ²
Sample volume	Flexible 1-400 mL, depending on sample type
Display	12" color touch screen
Operating software	Results Plus
Language	Multiple languages, including English, Chinese, Thai, and Russian
Communication interfaces	USB and ethernet
Operating temperature range	5 to 40° C
Ingress protection per IEC 60529	IP-65 certified
Wavelength range	900 -1700 nm detector, 950 -1650 nm applied
Detector	256 pixel thermoelectrically cooled, high-detectivity indium gallium arsenide (InGaAs)
Wavelength accuracy	< 0.05 nm
Photometric noise	<10 µAu
Power requirements	100 -240 V, 50/60 Hz
Dimensions (HxWxD)	517 x 370 x 390 mm (including touch screen)
Weight	13 kg general purpose (GP), 21 kg sanitary design (SD)

For sales and support contacts, please visit www.perkinelmer.com/DA7250

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