



Quant

The FT-NIR Analyzer
Dairy, Food, Agri, Feed & Bioenergy



Quant Spectroscopy

Superior FT technology and sampling perfectly matched

High value of ownership based on representative results

If representative results matter to you, the Quant FT-NIR analyzer from Q-Interline is the right choice. The Quant is used for non-destructive analysis of solids, powders, pastes and liquids. It will supply you with fast and representative results.

The Quant is ideal for production optimization and quality control. It will ensure that you know what is really in your product.

Exceptional spectral performance

The Quant from Q-Interline is the only analyzer based on 2nd generation FT-NIR technology. The exceptional spectral performance of the Quant will generate the highest quality spectrum with the lowest noise. Such extreme spectral quality allows superior quantification of traditional components, and also makes the Quant ideal for quantification of low signal components.

Low cost of ownership

The Quant has no scheduled maintenance and the light source and laser has an expected lifetime of 10 years.

There is a lifetime warranty on the interferometer scanning mechanism and on all optical components of the interferometer against damage or degradation by moisture.

The Quant uses no chemicals and the sample containers are either inexpensive or re-usable, minimizing the cost per analysis.

Flexible PC solution

The Quant lifetime supersedes that of any computer, consequently of that, the Quant comes with an external all-in-one computer. This radically reduces any computer related downtime of the equipment.

The all-in-one computer enables a wide range of PC accessories, offering the user maximum flexibility, e.g. label printer, barcode reader, upgradable windows, LIMS connectivity and virus scanner.



Optimized sampling solutions

Applying correct sampling from the process to the lab is essential if unbiased results are to be obtained. Only unbiased results can serve as a basis for process control and optimization. All the sampling accessories developed by Q-Interline are the result of our extensive experience and knowledge in the field of representative sampling and Theory of Sampling.

Quant Sampling

State of the art analyzer with unique sampling



Spiral Sampling

For heterogeneous samples of all kinds

The Spiral Concept will change the way you work. The Quant equipped with the patented spiral sampler offers truly representative scanning of heterogeneous samples. Scanning an amazing 375 cm² surface in FT-NIR quality. The Spiral Sampler provides up to 20 times more scanning surface than traditional petri dish solutions. With the Spiral Sampler you can avoid cumbersome and time-consuming pretreatment of the samples.



Jar Sampling

For sealed tumbling and scanning of dry products

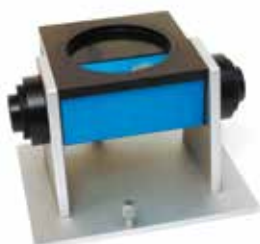
The Jar Sampler is the only accessory offering tumbling and spinning of the sample in a sealed container. The Quant equipped with the Jar Sampler is optimal for handling samples of all degrees of heterogeneity. With the 125 ml glass jar the sample is analyzed by reflection measurement. The jar rotates continuously during analysis providing representative sampling, making sure the sample is constantly mixed and reducing the effects of product heterogeneity.



Cup Sampling

For scanning of all types of pasty products

The Teflon Cup is easy to fill and empty; a lot easier than the petri dish when it comes to pasty products. Scanning is performed on the surface, eliminating effects from cleaning. To minimize the effects from heterogeneity the cup is continuously spinning during analysis.



Petri Dish Sampling

A versatile scanning method

For many powders and other products, the Petri Dish Sampler is an easy to use, versatile sampling method. To minimize the effect from heterogeneity the petri dish is continuously spinning during analysis. The petri dish can be made of either glass, plastic or even Teflon to allow for use in the production area.



Disposable Vial Sampling

For easy scanning of liquid samples

Liquids and fluids are analyzed in transmission mode by means of disposable glass vials. This means minimal preparation and no cleaning. The Vial Sampler controls the sample temperature, eliminating temperature effects and making results highly reliable. Vials are available in 5, 8 and 12 mm outer diameter.

Fibre Optic Sampling

Remote and flexible sampling

The Quant equipped with a fiber optic interface enables remote and flexible scanning offering endless possibilities. The interface makes it possible to use fiber optic cables of various lengths. A wide variety of sampling cells and probes such as transmission, trans-reflectance and diffuse reflectance are available. Ideal for research and special applications.



Quant software

InfraQuant for easy and secure operation



InfraQuant

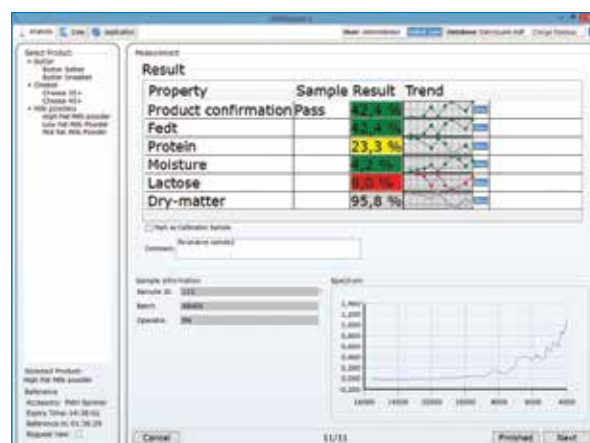
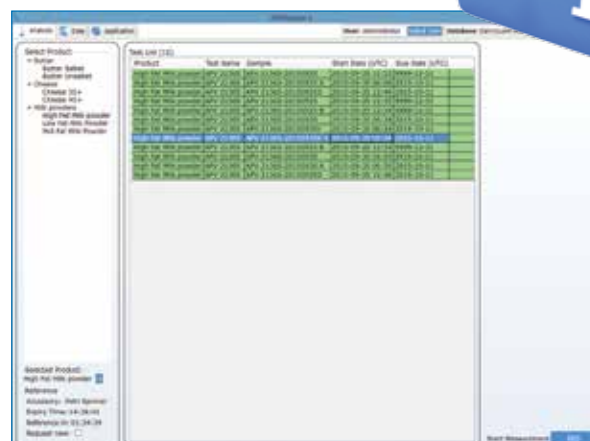
InfraQuant is included with all Quant systems. InfraQuant is continuously improved in collaboration with our customers and offers an easy to use platform to streamline QC operations and produce analytical results of high and trusted quality. InfraQuant has an advanced configuration module allowing secure and customized configurations.

Analysis

InfraQuant guides the operator through the analysis sequence. With information messages, warnings and reminders, the wizard ensures consistent results independent of operator skills and experience. The results are presented as clearly visible figures with integrated colour codes. The colour codes reflect the validity of the results measured against pre-set criteria. The operator interface can be configured to run in many languages.

LIMS connectivity

InfraQuant software is based on SQL database technology. It will supply results in XML format for easy integration with customer LIMS systems.



AnalyticTrust

AnalyticTrust

Optimize the value of your Quant

AnalyticTrust is a web-based software for monitoring and adjusting the Quant applications. AnalyticTrust monitors analyzer hardware, sampling processes, calibration samples, applications and reference lab. It ensures precise and trusted data and in cases of non-compliance, you are automatically notified.

AnalyticTrust is the best-structured instrument control system to evaluate the performance of analytical instruments and processes. It makes remote adjustment and calibration possible and ensures that the Quant and the analytical processes perform to their highest potential.



Remote support

Q-Interline offers remote support, by means of secure team-viewer solutions.



Value through insight

SINCE 1996

Since 1996 Q-Interline has specialized in developing and providing analytical solutions to our customers. We provide solutions for quality and process control.

Commitment, integrity and competence

Through commitment, integrity and competence Q-Interline offers high quality solutions to a wide variety of industries. Our customers acknowledge us as a trusted supplier and technical advisor due to our unique solutions, extensive knowledge, outstanding support and long-term commitment.

We provide value through insight

Our experience, along with our understanding of business and processes, enables us to identify our customer's challenges and needs through open dialogue. Based on this understanding we offer you unique solutions that will provide high quality analytical results to act upon. We call this value through insight.

We are your long-term partner

Buying an analyzer from Q-Interline give you access to much more. For our team this marks the beginning of a long-term partnership. We know that our solutions in combination with our extensive support offering is what makes us different. We work closely with our customers to ensure that our analyzers will continue to deliver analytical results of high value year after year.

You can trust our solutions

With more than 30 million accurate analysis results generated annually on Q-Interline instruments we have great confidence in our analyzers, our sampling and calibration reference. We are a Business-to-Business company with installations in more than 30 countries, but we always work Hand-in-Hand with our customers, doing our best to improve the value of your business.



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Specifications of the Quant Analyzer

SPECTROSCOPIC PERFORMANCE

(typical, at 25 °Celsius with InAs detector)
Interferometer Spectral Range 3,700 to 14,885 cm^{-1}
Signal to Noise (60 s, 16 cm^{-1} , at peak response) > 500 000: 1 (InAs)
Frequency Repeatability (@ 7300 cm^{-1}) < 0.006 cm^{-1}
Frequency Accuracy (@ 7300 cm^{-1}) < 0.01 cm^{-1}
Absorbance Reproducibility (toluene) < 0.002 AU
Detector Options: DTGS, InAs, InGaAs

OPTICAL BENCH

Beamsplitter Material ZnSe (non-hygroscopic)
Patented Interferometer Mechanism. High-throughput double pivot Michelson, fully jacketed
Source (with electronic stabilization) Quartz Halogen, 10-year expected lifetime
Solid-state Laser Maintenance Free

DATA COMMUNICATIONS

Hardware Port Ethernet, 10/100 Mbps

INSTRUMENT ENCLOSURE

Rugged Design, all-metal frame with integral handles
Size 435 mm (W) x 280 mm (D) x 372 mm (H), Weight 24 kg

ENVIRONMENTAL

Universal built-in Power Supply 120-240 VAC, 50/60 Hz, 65 W
Operating Temperature 10 °C to 35 °C
Operating Relative Humidity 5 % to 80 %, non-condensing
Regulatory Certification and Compliance TUV, CE and RoHS

FT-NIR Technology

The Quant Analyzer is powered by the latest ABB Bomem FT-NIR technology. FT-NIR is short for Fourier Transform Near Infrared and measures the entire spectrum of the sample.

This technique generates a large amount of high-quality spectral data, which makes it possible to accurately determine various components.

