



InfraAlyzer 2000

The new dimension

Fully automatic NIR analyzer with integrated PC for production monitoring and quality control of raw materials and finished products.

Use one system to analyze, evaluate and archive your data. For an unlimited number of products, each with up to 15 properties. Available with a wide range of accessories for all types of products.



InfraAlyzer 2000

Ideal for many markets and applications

The InfraAlyzer 2000 was specifically designed for the analysis of powdered, semi-solid, liquid, and intact products.

Special sample drawers of tailor-made design are available for each of those product groups.

Liquid samples are pumped or injected into a special measuring cell in the liquid drawer.

Changing between one sample drawer and another is quick and easy, so providing the utmost flexibility and user-friendly sample handling.

The InfraAlyzer 2000 was specially developed for the analysis of typical constituents in the food, agricultural and chemical industries. Its robust construction makes it ideal for on-going quality control in production areas.

Typical applications

- Determination of properties such as moisture, protein, sugar, alcohol, iodine number, and oil content in food production
- Monitoring of fat, moisture, crude fibre, starch, and protein content in the feed industry (green feed, feed raw materials, mixed feed)
- Hydroxyl and acid number determination in the polymer industry
- Satellite system as part of an InfraNet analyzer network



Operation – simplicity itself

The InfraAlyzer 2000 is controlled via a touch-sensitive keypad on the front panel. Control and calculation are performed by the integrated PC.

The analyzing procedure is very straightforward. Just put the sample in the sampling cup, then close the drawer to start the measuring cycle. After a few seconds the results are shown on the built-in display panel and can be documented in a printed report. In conformance with GLP requirements, all measurements are stored on the built-in hard disk.

Analysis covers all properties that were calibrated for the particular product.

The InfraAlyzer 2000 can also be controlled by an external PC running SESAME software.



Front panel

Advantages

- Integrated PC and pre-installed Quanta software allow analysis, calculations and archiving by one system
- Electronics module uses digital signal processing for extremely fast analysis; analysis time down to a few seconds
- PIOTA precision optics with low noise and automatic reference sampling
- Dialog display for easy operation
- Only one analytical system required as all properties are determined simultaneously
- Environmentally friendly analysis with no chemicals
- Direct application at the production site for frequent measuring
- Proven calibrations for optimum product quality
- Auto-diagnostics for trouble-free system operation
- A variety of interchangeable sampling devices gives you the utmost flexibility in sample handling
- Rational work within an InfraAlyzer network (InfraNet)

How the InfraAlyzer 2000 works

Both quantitative and qualitative NIR analysis is based on the interaction of Near InfraRed light with the molecules of a sample.

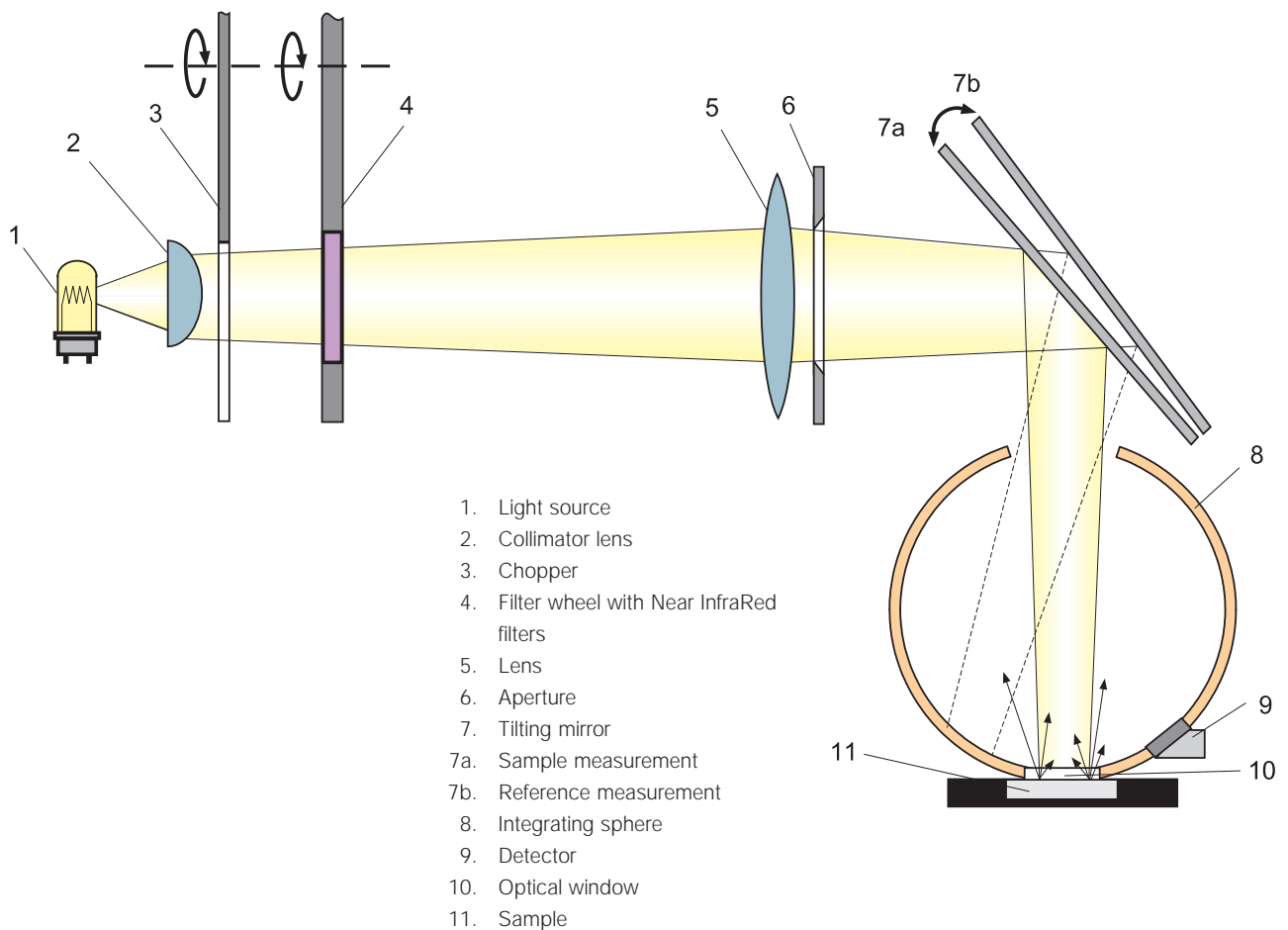
The sample is irradiated with Near InfraRed light of specific wave-lengths, selected from up to 19 high-precision interference filters.

The penetrating light is partly absorbed by the sample and partly reflected.

The wall of the gold-plated integrating sphere contains a lead sulphide detector which measures the reflected portion of the incident light.

The resulting spectral information is characteristic for the product and allows a determination of product-relevant properties.

The gold surface for the automated reference sampling also serves as an internal reference, so guaranteeing high drift stability.





Technical data

- For powders
- For solids and semi-solids
- For liquids (optional)
- For non-homogeneous products (optional)
- 19 NIR filters
- LCD display, touch-sensitive keypad
- Integrated Quanta software
- Unlimited number of products, up to 15 properties per product
- Auto-diagnostics
- Printer (optional)
- SESAME software (optional)

Power requirements min. 90 V AC (50-60 Hz)
max. 260 V AC (50-60 Hz)

Operating temperature 5° to 40° C

Environmental conditions up to 80% relative humidity, non-condensing

Dimensions

Width 47 cm
Height 42.5 cm
Depth 46 cm

Weight 29 kg



Sample drawer for powders



'Dutch Cup' with gold reflector for viscous products such as evaporated milk, sugar cane juice, syrup, alcoholic fillings



Rotating sample cup for non-homogeneous products such as cocoa-beans, peas, animal feed-pellets



Temperature-controlled liquid drawer (10-60°C). The following path lengths are available: 50, 100, 200, 500 or 800 µm. Pump optional.