CORONA PLUS

Tuned by Carl Zeiss

The next generation in the compact class

ZEISS

We make it visible.

Standard: Innovative spectrometer technologies,
superior measuring convenience, optimal handling.
CORONA PLUS – Tuned by Carl Zeiss.

The new CORONA PLUS

CORONA PLUS REMOTE
with OMK 500 measuring head

Measuring in the fast lane

To achieve a decisive lead in quality and precision, being faster is simply not enough. Only maximum reliability and precision for every application – even under extreme conditions – makes measuring really efficient.

CORONA PLUS 45 NIR

Carl Zeiss has been building on its success story ever since the first instrument with the name CORONA hit the market in 1999. The robust and compact VIS-NIR spectrometer provides broad access to completely new applications in numerous market segments. Today, these CORONA systems are the world leaders and set the standard in the diode array spectrometer market.

With CORONA PLUS, Carl Zeiss has now developed a new series of outstanding spectrometers. The company's years of experience in this field and the systematic implementation of increased customer needs have made CORONA PLUS possible.

The combination of the latest polychromator technologies featuring excellent optics and fast, low-noise electronics provides the foundation for maximum sensitivity, linearity and large dynamic range.

Combined with a new platform of firmware and software, these benefits make the systems ideal for virtually all applications in a wide range of industries.

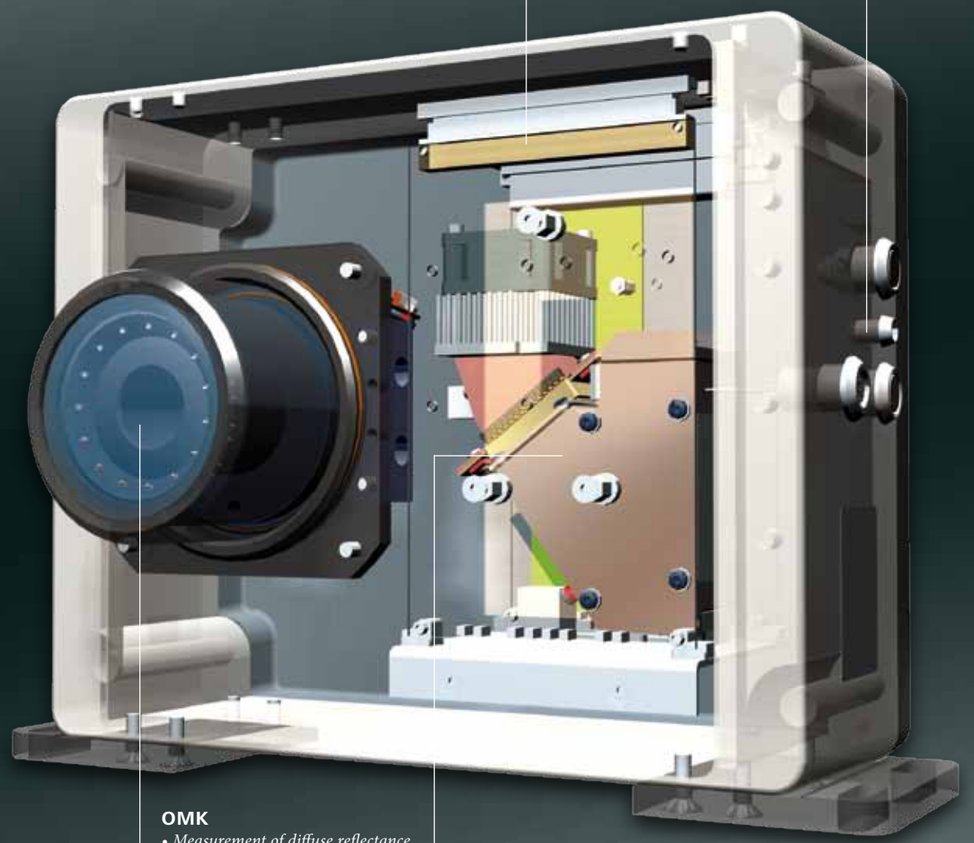
What is new on CORONA PLUS?

- New optical design for more sensitivity and minimal measuring times
- Higher resolution and an extended wavelength range up to 2.2 µm through the use of new PGS polychromators
- Low noise and outstanding linearity through the use of state-of-the-art electronics
- Less thermal build-up environments through reduced power consumption, leading to better stability
- Highly stabile, micro-processor controlled light sources with longer service life
- Standard interfaces such as ethernet for fast, secure data transmission even in harsh environments
- Available as a single or dual-beam system
- Outstanding user, maintenance and service friendliness

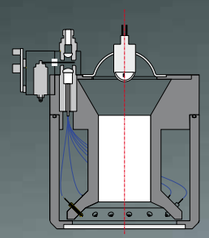
CORONA PLUS 45 NIR

Electronics
- *Low power consumption*
- *Instrument parameters can be set via software*
- *Micro-processor controlled cooling electronics for the NIR module*

Interface
Ethernet



OMK
- *Measurement of diffuse reflectance*
- *Illumination: 0°*
- *Observation: 45° circular*
- *Effective measuring area: 20 mm*



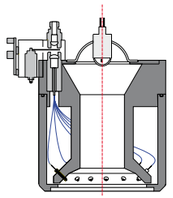
Polychromator: PGS / MMS
- *Compact, permanently aligned design*
- *Robust and thermally stabile*
- *Small size*
- *High light sensitivity*

Accessories: TURNSTEP
- *3 different rotation speeds*
- *Standard design for 3 specimen tray sizes (60, 80 and 200 mm diameter)*

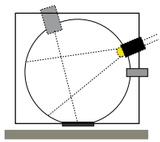
It's what's under the hood that counts

The enclosure of CORONA PLUS may not be exciting, but what's under it certainly is.

For CORONA PLUS, the single components were not only optimized, but also perfectly matched to each other. Less power consumption, lower thermal build-up and increased service life make this system extremely stabile. State-of-the-art polychromator technology from Carl Zeiss enables maximum resolution and expands the wavelength range for measurements up to 2.2 µm. A micro processor integrated into the controller (ECCU) is the heart and soul of this outstanding system. Various polychromator types can be implemented using a plugboard. The new electronics guarantee excellent noise behavior and ensure maximum linearity. The ECCU features an ethernet connection and can also accommodate wireless LAN if required.



OMK 500
- *Measurement of diffuse reflectance*
- *Illumination: 0°*
- *Observation: 45° circular*
- *Effective measuring area: 20 mm*



OFR D/8°
- *Illumination: diffuse*
- *Observation: 0° or 8°*
- *Sphere diameter: 55 mm*
- *Effective measuring area: 15 mm*

The right package for everyone

Some things in life are a matter of taste.
Comfort and variability during measurement definitely aren't.

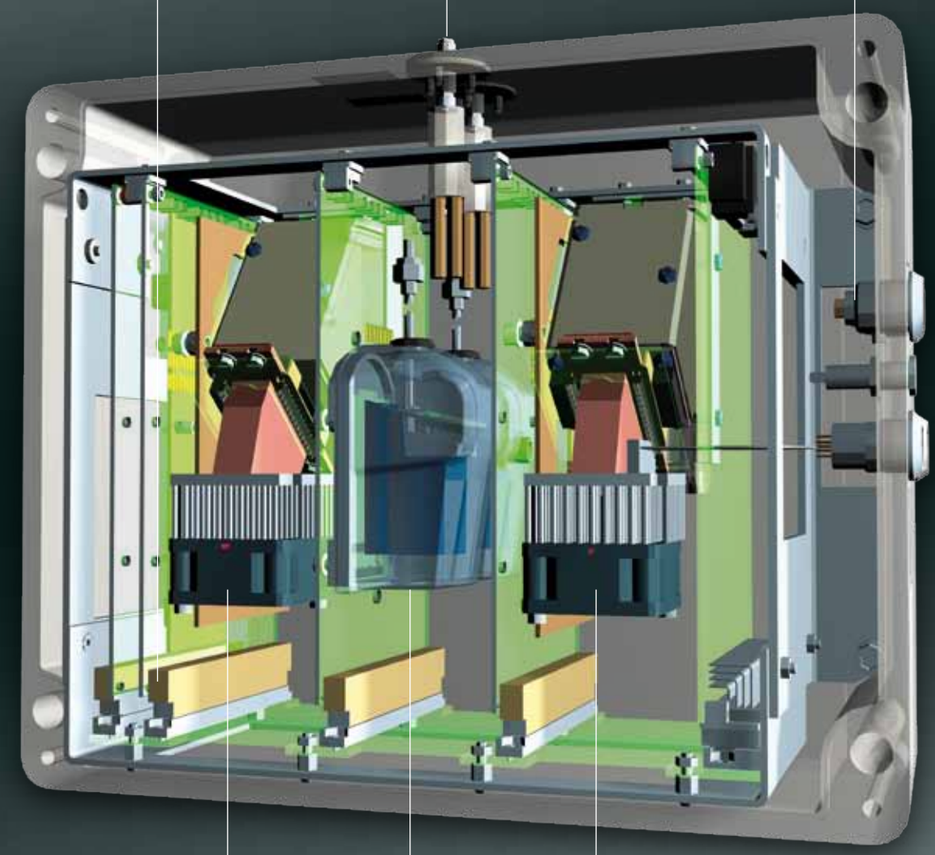
It does not matter if you want to perform a transmission or reflectance measurement, or intend to work in different wavelength ranges, with the different versions of CORONA PLUS, you remain flexible. It will take you practically no time to change the measuring heads and use CORONA PLUS for new tasks. CORONA PLUS is tailored to in-process or lab requirements, keeping you ideally equipped for many applications.

CORONA PLUS REMOTE VIS-NIR (dual-beam configuration)

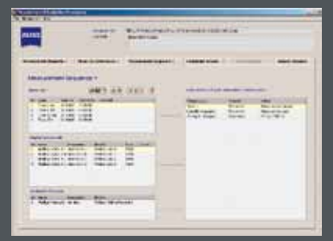
Electronics
- *Low power consumption*
- *Instrument parameters can be set via software*

SMA-port

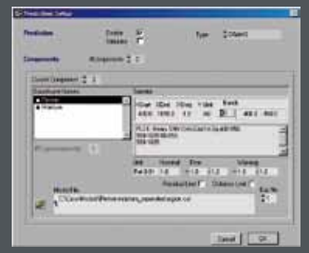
Interface
Ethernet



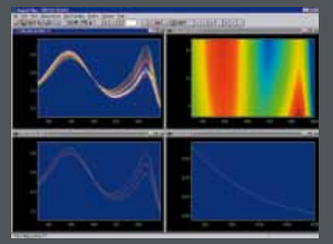
Polychromators: PGS/MMS
- *Compact, permanently aligned design*
- *Robust and thermally stabile*
- *Small size*
- *High light sensitivity*



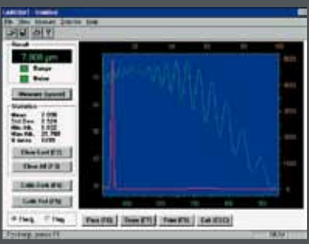
processXplorer



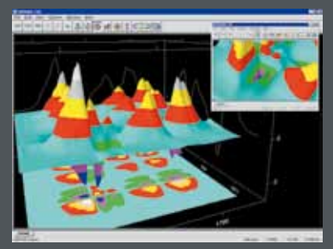
CORA



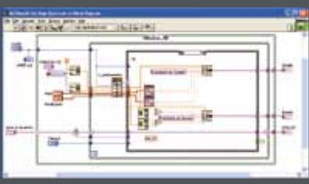
ASPECT PLUS



LABCOAT



GRAMS® 32



LabView® and C/C++ libraries

Find the right way every time

Navigate your way through complex measuring tasks. No problem with the customized, ready-to-use software packages.

Functional libraries under LabView® and C/C++

The functional libraries ensure that the creation of individual program packages for the CORONA doesn't pose a problem.

+ Driver library for spectral range detection and parameter administration
+ Library for color evaluation of spectral ranges
+ Calculation of layer thickness of transparent media (FFT)

Specialized software? At your request!

In addition to the above customized software packages are available for immediate operation of different tasks, such as:

+ In-line and at-line measurement of color values of conveyor belts
+ Determination of moisture
+ Multi-component analysis with calibration routines created under GRAMS® 32 or Unscrambler®
+ Measurement of layer thickness of coatings on plastic, aluminium and glass

Naturally we would also be happy to create software to your own specifications e.g. for semiautomatic or fully-automatic incorporation of the CORONA systems into your production process.

processXplorer

The new, flexible monitoring software from Carl Zeiss, specially developed to meet the requirements of the chemical and pharmaceutical industries. The processXplorer can be individually adapted to an extremely wide variety of applications. It offers a broad spectrum of evaluation, analysis and data processing capabilities for on-line process monitoring, as well as functionality for user and data management. Seamless integration of chemometric models produced with Unscrambler® or GRAMS® 32 is now available. The processXplorer complies with the stipulations of CFR 21 Part 11.

ASPECT PLUS

The versatile, universal spectroscopy program from Carl Zeiss. Easy to use and equipped with extensive functions, its offers options such as color metrics, layer thickness computation and macro programming language that allow use in applications that exceed standard routine analysis.

LABCOAT

The ideal software interface for measuring layer thickness of transparent coatings or materials in the range of 0.1 to 150 µm on the basis of white light interference. The program is suitable both for routine analysis and research and for in-line use. User friendliness and high measuring and evaluating speeds are its outstanding features.

CORA

CORA is a software program package specially designed for the requirements of agriculture and food processing. Its great ease of operation, data security, data base administration, spectral manager and the possibility of integrating a great variety of data make this package a top-of-the-line option in on-line, routine and field analysis. Applications include monitoring GPS coordinates, specimen temperature and different chemometric calibration models.

Benefits

+ New open software concept
+ Dual use: On-line and At-line
+ Extensive sample list management
+ Customizable operation, measurement, prediction and output
+ Multiple and expandable support of third-party external equipment

Safe on every site

Whether during operations or in the lab, on the go or in rough conditions,
with CORONA PLUS you can master every measuring job.

Foods
- Determination of fat, starch and proteins in food
- Detection of product moisture
- Monitoring of drying processes
- Incoming inspection of powder-based products such as flour or milk powder

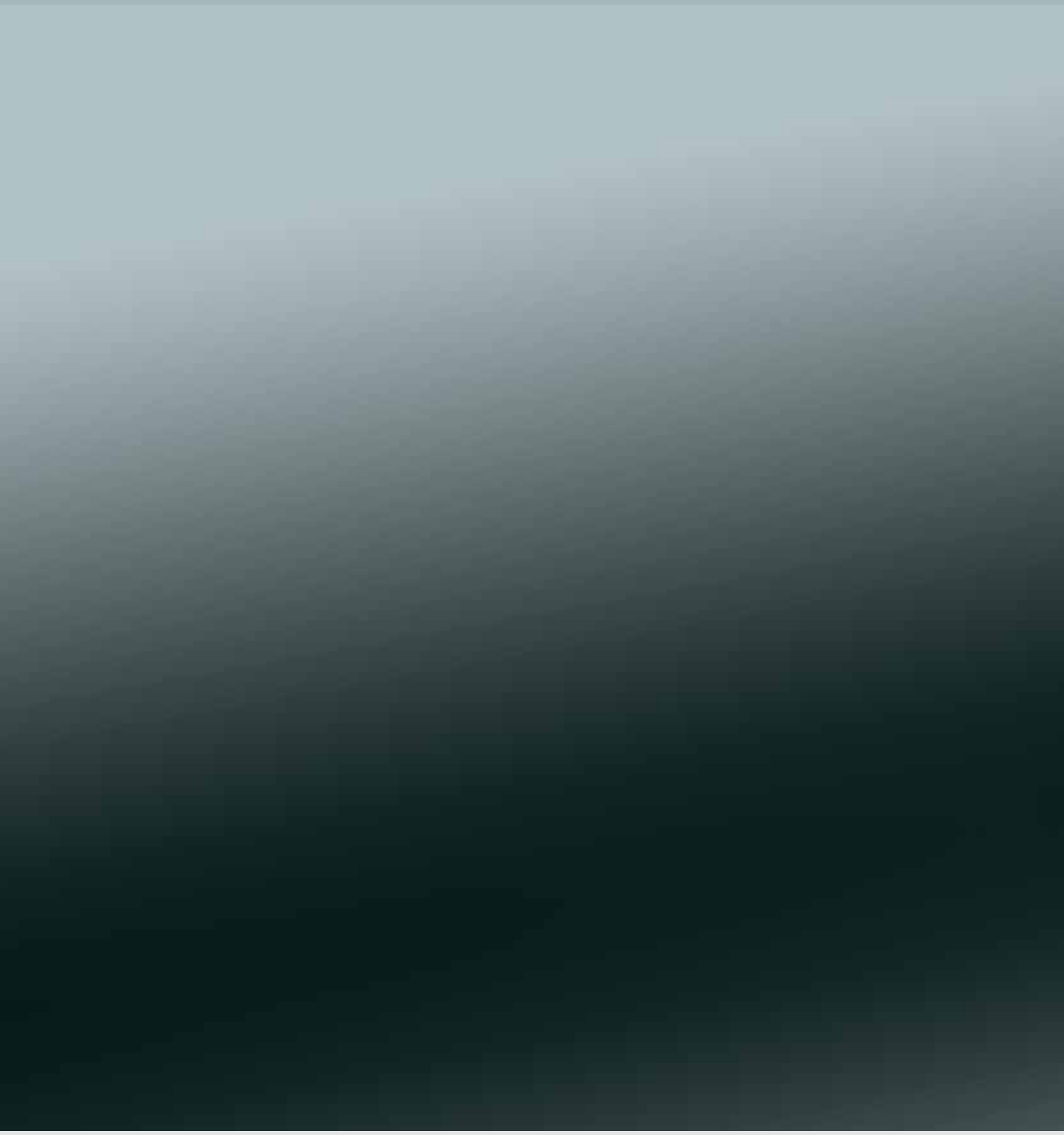
Agriculture
- Determination of the contents of dry substance
- Quality control of grain (protein, moisture, etc.)

Pharmaceutical industry
- Identification of raw materials
- Monitor production processes

Measuring on conveyor belts
- Determination of moisture and color in paper manufacture
- On-line color of textile and plastic production
- Determination of color and degree of heat protection of architectural glass
- Measurement of layer thickness of foils

Plastics technology
- Identification of plastics
- Color of plastic lines or components
- Specification of layer thickness of transparent coatings

Optical industry
- Reflection and transmission properties of coated glass
- Color properties of optical coatings



Carl Zeiss Microscopy GmbH
07740 Jena, Germany
Optical Sensor Systems
Phone : + 49 3641 64 2838
Telefax : + 49 3641 64 2485
E-Mail : info.spektralsensorik@zeiss.de

www.zeiss.de/spectral

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