



LED- AND LIGHTMEASUREMENT
OPTIMIZED FOR PRODUCTION AND
LABORATORY



**INLINE COLORMEASUREMENT
SYSTEMS**
ALL SURFACE STRUCTURES FROM
INHOMOGENEOUS TO GLOSSY



ELECTRONIC MODULES
CUSTOMIZED PCB AND MODULE
DEVELOPMENT



MEDICAL TECHNOLOGY
OPTICAL MEASUREMENT TECHNOLOGY AND
REGULATION ELECTRONICS



**SPECTRAL MEASUREMENT
SYSTEMS**
AUTOMATED LIQUID ANALYSIS



**SENSOR TECHNOLOGY FOR
CULTIVATION DEVICES**
SYSTEMS FOR PLANT DIFFERENTIATION
AND WILDLIFE DETECTION



AUTOMATION SOLUTIONS
FROM ENGINEERING TO MECHANICAL DESIGN
AND MANUFACTURING



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OPTICAL
MEASUREMENT
TECHNOLOGY
AND CONTROL
ELECTRONICS

The high-resolution color and spectral sensor systems by **PREMOSYS**® demonstrate performance capabilities that meet the highest demands of a wide range of industries worldwide. The sophisticated sensor technology is characterized by its process-safe and reliable long-term stability, even under constantly changing environmental conditions. Easy to integrate into any application and with their durable, maintenance-free properties, the compact systems fit ideally into existing and new processes.

OPTOELECTRONICS IN BIOTECH AND MEDICAL TECHNOLOGY

In addition to the development and production of innovative systems for professional color recognition and color measurement, our own research in the field of new spectral sensor chips and technologies has been firmly anchored in our corporate philosophy for over 20 years.

The solutions range from individual components such as miniature spectrometers to complex complete systems for analyzing contents based on optical parameters. The engineered products are always developed as “living systems” in order to efficiently meet the constantly growing and changing requirements of markets and customers.

Our products, expertise and services will assist you in maintaining and collectively improving your quality and productivity at a consistently high level.

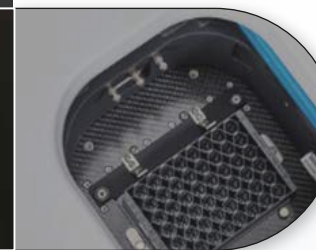
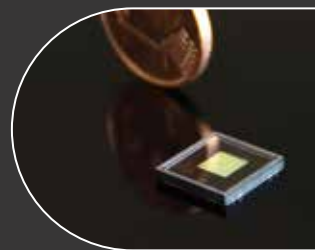
Connected. Wired. Linked.

PREMOSYS® NANOS +

- Filtering of specific wavelengths using nanostructures located directly on the sensor chip
- Optical filter structures smaller than the wavelengths of light
- Cost-effective production of all CMOS technology

TECHNICAL DATA

- 1,600 spectral information on 16 mm² measuring surface with high precision
- **VIS** (400 – 850 nm)



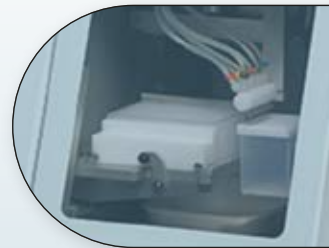
PREMOSYS® REAL-TIME ANALYSIS

Optoelectronics and complex control systems by **PREMOSYS**® are used worldwide in real-time analysis processes such as bioreactors to determine fluorescence and other important cultivation parameters.

PREMOSYS®

NUCLEIC ACID EXTRACTION

Thanks to the high-precision sensor technology, powerful electronics and specially developed software solutions from **PREMOSYS**®, automated nucleic acid extraction has become a permanently stable and reliable process in numerous laboratories.



PREMOSYS® OPLYTIX SPECTRA base

- Miniature spectrometer for biotech and high-performance processes
- Measurements from **VIS to NIR**
 - Inline monitoring of biotechnological processes and polymer melts



TECHNICAL DATA

- **VIS** (360 – 830 nm)
Resolution: 5,2 nm
- **VIS – NIR** (500 – 1100 nm)
Resolution: 6,7 nm
- **NIR** (950 – 1700 nm)
Resolution: 9,5 nm

PREMOSYS® OPLYTIX SPECTRA clear

- High-precision spectrometer with large spectral measuring range
- Measurements from **UV to NIR**
- Inline monitoring of biotechnological processes and polymer melts



INTUITIVE
USER-
INTERFACE

TECHNICAL DATA

- **UV – NIR** (190 – 1100 nm)
resolution: 1,0 - 1,8 nm
- Further variants are available on request (resolution up to 0.15 nm)



PREMOSYS® eFLAT-S

The eFLAT-S is a unique, very compact double spectrometer. The system, based on the latest technology, guarantees very high process reliability in parallel operation of up to two spectrometers in parallel guarantees very high process reliability when analyzing ingredients by evaluating spectral measured values.