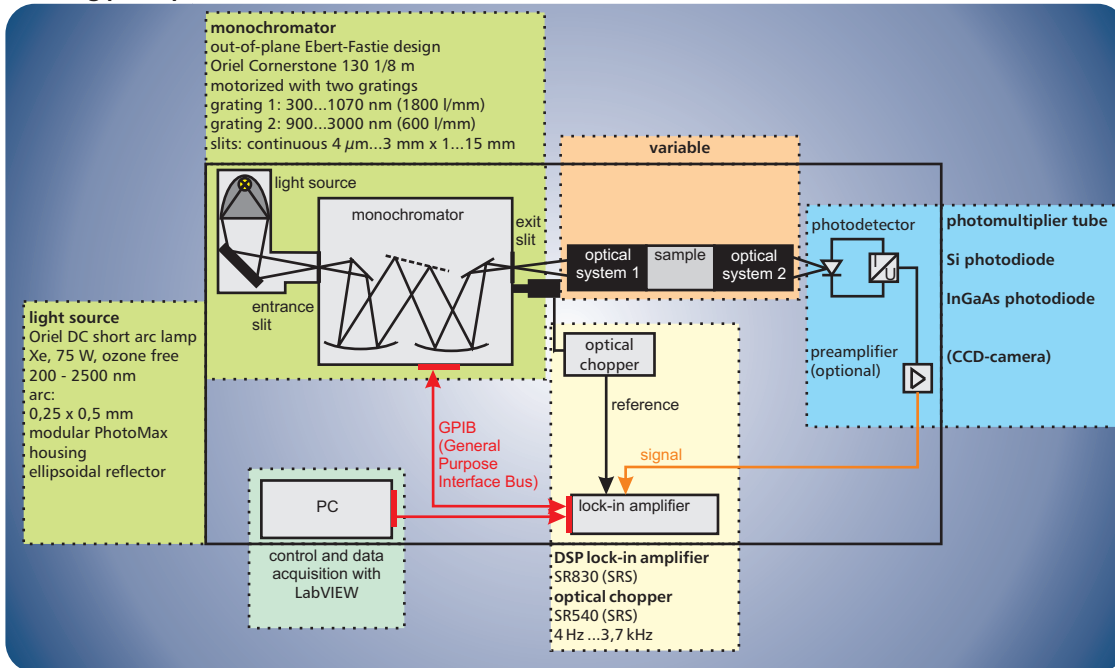


Modular system for the spectral characterization of optical elements

Working principle:



General information:

The modular system includes a Xe light source, a motorized monochromator for wavelength separation and a lock-in amplifier with optical chopper for narrow-band amplification with low SNR. A PC controls via GPIB lock-in amplifier and monochromator. Programming of monochromator and lock-in amplifier and data acquisition is realized using LabVIEW.

Application:

Variable measuring system for the spectral analysis of optical components, fibers, layers etc.

A grating with 1200 l/mm provides:
maximum rate: 205 nm/s
wavelength accuracy: 0.5 nm
precision: 0.11 nm

LabVIEW-programme for control and data acquisition:

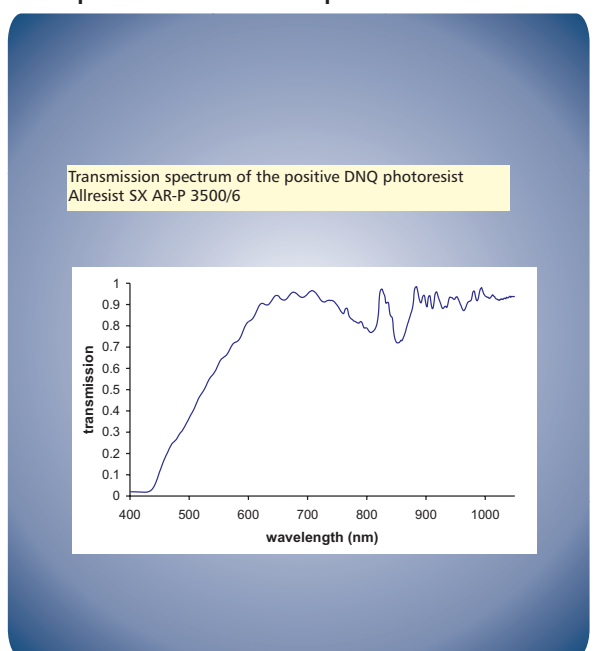
measured spectrum

current detector signal

control panel of the lock-in amplifier

control panel of the monochromators

Example of a transmission spectrum:



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SUPPORT

