
DIODE ARRAY UV/VIS/NIR SPECTROSCOPY

Overview

Diode array technology has become more widespread as the need for secured quality control of results in spectrophotometry increases.

The TIDAS concept with modular design of light sources and spectrometer cassettes combined with flexible measurement capabilities permits combinations of individually configured systems for a huge variety of applications. The well proven fibre-optic technology allows measurements independent of the location of the sample. Precise and very fast electronic circuits make measurement times down as low as 0.5 milliseconds per spectrum a possibility.

A full range of accessories is also available to cover the complete range of UV/VIS/NIR application requirements.

Modular Systems



TIDAS systems for the UV/VIS range from 190 to 1010 nm

TIDAS systems for the NIR range from 1100 to 2300 nm

Combined TIDAS systems for the UV/VIS/NIR from 190 to 2300 nm

FL-3095 Fluorescence Spectrometer



TIDAS S-CCD

TIDAS S instruments are available in various configurations. Different light sources like deuterium, tungsten, xenon or monochromators are available separately or integrated together with the spectrometer in a single housing. A broad range of spectroscopy modules covers the range from 190nm up to 2500nm. A coupling of spectrometers with different wavelength ranges is also possible. Additionally very sensitive single wavelength detectors (eg PMT) are available as well. Using these TIDAS spectrometer systems from J&M, measurements over the UV/VIS/NIR range from 190 nm to 2300 nm are possible. The ceramic spectrometer chassis guarantees maximum stability and consistent measurement results both in laboratory and process applications.



TIDAS P

TIDAS P series systems are specifically designed for tough environmental conditions in the process industries. Areas where they are successfully used include the pharmaceutical industry (mixing, cleaning and drying), the chemical industry (solvent monitoring, end point determinations), the automotive industry (layer thickness, LED production) and the food industry (beverage analysis).

The systems are easy to use and provide accurate results, quickly and reliably. Housings are available for process and meet most requirements up to and including ATEX certification. A combination with automatable probes and multiplexers allow robust systems for on-line, in-line and at-line measurements. Standardised or customer-specific software packages (21 CFR Part 11 compliant) for control and data evaluation complete the TIDAS P series.



TIDAS E

The TIDAS E series has been developed by J&M especially for teaching and research. This instrument range provides easy-to-use diode array spectrometers and flexible optical fibre technology at a reasonable price. These systems are suitable for routine analysis in the laboratory, including absorbance and fluorescence measurement, colour evaluation and layer thickness measurement using white-light interference techniques.

One advantage of the TIDAS E systems is the Ethernet interface which permits easy implementation in existing network environments. External devices, e.g. filter changers or light sources, can be controlled and triggered. Selected software packages, measurement cells, light guides and ready-to-use applications complete the program range. TIDAS E systems are available as preconfigured versions.

