

## TIDAS E UV/VIS - Entry Level Diode-Array Spectrometer for Education and Research



The TIDAS E series has been developed especially for education and research. This instrument range provides ease of use of the diode-array spectrometer and flexible optical fiber technology, at a reasonable price. The diode-array technology makes these instruments fast, precise and universally applicable.

The TIDAS E spectrometer series enables fast and efficient application of diode-array spectroscopy. They combine a detection system with an integrated light source, using the patented integrated dual cuvette holder and the option of the coupled external fiber-optic. External accessories such as sample or filter changers are energized through control wires and triggers. Through LAN connections, the TIDAS E is efficiently integrated into the existing network or connected directly to the computer.

The TIDAS E UV/VIS is suitable for the wavelength range from 190nm to 720nm and offers very high sensitivity. A deuterium/halogen light source is integrated.

## Specifications

Parameter	Specification
<b>Order No.</b>	81 699 14
<b>Wavelength Range</b>	UV/VIS 190 – 720 nm
<b>Spectral Resolution</b>	< 7 nm
<b>Wavelength Accuracy</b>	< 1 nm
<b>Photometric Accuracy</b>	± 10 mAU
<b>Baseline Drift @ 250nm</b>	1*10E-03 AU/h *1)
<b>Signal-to-noise Ratio</b>	< 4*10E-05 AU *2)
<b>Included Light Source</b>	Yes, fiberlight combination
<b>Number of Diodes (Pixels)</b>	256
<b>Integrated Dual Cuvette holder</b>	Yes, 10mm cuvette
<b>Bench Space Requirements</b>	approx. 26 x 15cm
<b>Packaging Dimensions</b>	approx. 46 x 32 x 30 cm (W x D x H)
<b>Weight</b>	approx. 5 kg net weight, 6 kg gross weight
<b>Power Supply</b>	85 – 265 VAC / 47 – 63 Hz
<b>Interface</b>	TCP/IP 10/100/1000 Mbit/s
<b>Digital I/O</b>	Standard: 2 x IN / 2 x OUT
<b>A/D converter</b>	16 Bit
<b>Optical Fiber Connection</b>	SMA 905
<b>Supply Scope</b>	TIDASDAQ software, Power supply, RJ 45 patch cable, user manual

We reserve the right to make technical changes without any prior notice.

\*1) Baseline drift will be measured at 250 nm after 10h warm up @ 21°C±2°C ambient temperature according to ASTM E685

\*2) Noise will be measured at 250 nm after 10h warm up @ 21°C±2°C ambient temperature according to ASTM E685, without methanol flow with the following settings:

- Integration time <100ms
- Pixel bunching 2 (2x2.2nm ~ 4nm)
- Integration time x accumulation <2 sec.
- Detector saturation ~ 80%,