Single Beam Spectrophotometer

High Resolution Low-Noise Spectrophotometer for Sensitive Applications

Full option and user-friendly computer program

Application Areas

- Engineering
- Food & Beverage Quality Control
- Chemistry
- Laser Characterization
- Biology
- Physics & Astronomy
- Protein & Nucleic Acid Analysis
- Volcanology
- Color Analysis
- Environments
- Nanotechnology
- Polymers

Spectrophotometry is a method to measure how much a chemical substance absorbs light by measuring the intensity of light as a beam of light passes through sample solution.

UV-Visible and NIR spectroscopy is a mature and well-established analytical technique used extensively in many industry sectors including Environmental Analysis, Pharmaceutical Testing, Food and Beverage Production to name but a few. Teksan manufactures an extensive range of UV and Visible and NIR Spectroscopy instrumentation guaranteed to meet the needs of your application. Further information on the UV-Vis-NIR product line along with a brief introduction to UV-Spectroscopy can be found in our website.

- High performance
- Low stray light
- High Wavelength accuracy
- blazed grating 300-600-1200lines/mm.
- Local control software for photometric fixed
- wavelength measurement.
- Easily upgraded to include quantitative analysis,
- multi wavelength spectrum & kinetics.
- Easy to use cell holder storage.
- Robust modular design with a small footprint.
- Can be used with WIN-Linux-MAC software.

Features and Specifications

Optical Specifications	
Mode	Single Beam
Detection	CCD Array (3648 Pixel)
Wavelength Range	280-950
Optical Resolution	1.7 nm (Configuration dependent)
Light Source	Deuterium & Tungsten halogen lamp
Absorbance	0 to 3 A
Stray Light	<0.03 %T
Wavelength Accuracy	<±0.1 nm
Wavelength Reproducibility	< ±0.02 nm
Photometric Accuracy	Using potassium dichromate, EP method < ± 0.01 A
Photometric Noise (RMS)	< 0.001 A 60 scan at 0 A, 500 nm
Photometric Stability	<0.002 A/h after 1 hr warm-up
Baseline Flatness (RMS)	<0.01 A - 0.5 sec blank, 0.5 sec scan
Scan Time	0.5 ms to 10 s
Typical Scan Time	20 ms
Software and System	
Software	Tunsu
Operational System	Windows-Linux-MAC
Physical Dimensions (NO Hard case)	
Size (W x D x H)	490 x 417 x 258 mm
Weight	15kg
Physical Dimensions (With Hard case)	
Size (W x D x H)	590 x 517 x 358 mm
Weight	19kg
Power Requirements	
Power Consumption	100 W
Line Voltage	220 V
Line Frequency	50-60 Hz
Environmental Conditions	
Operating Temperature	5 – 35 ˚C
Non-Operating Temperature	-20 – 50 ˚C
Humidity	<95% @ 20-40 ˚C

SERVICES AVAILABLE

Technical Support

Installation and Setup

Maintenance

Application Support

Hardware Support

Guaranteed Warranty