ACTIVE SPECTRUM

www.activespectrum.com

Benchtop Micro-ESR™

Active Spectrum manufactures the world's smallest Benchtop Electron Spin Resonance (EPR/ESR) spectrometer.

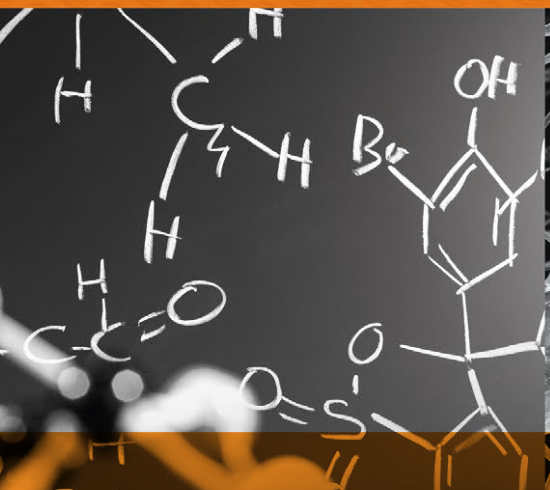
Industrial, scientific and educational applications of electron spin resonance are now extraordinarily cost-effective.

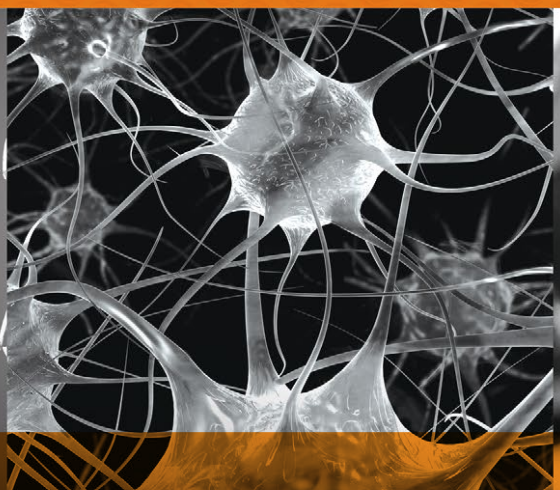
ASI's Benchtop Micro-ESR™ includes our patented miniature electron spin resonance spectrometer, operating at 9.5 GHz with a sweep range of 300 Gauss and sub-micromolar sensitivity.

Also included are an automatic temperature controller and full Windows 7 computer system with Ethernet and multiple USB ports.

Active Spectrum's portable Benchtop Micro-ESR has applications in industry, research, and education.

- Measuring Reactive Oxygen and Nitrogen Species
- Spin Labeling
- Spin Trapping (BMPO, DMPO, PBN, TEMPOL, PTIO, etc)
- Crude Oil: Asphaltenes and Vanadium
- Kinetics
- Education
- Dosimetry
- Monitor the Thermo-oxidative Breakdown of Lubricants
- Shelf Life of Food Products
- Soot and Carbon Black
- DNP





SPECIFICATIONS

Parameter	X-band (9.5 GHz)
Sensitivity	0.1 µM
Sample Tube diameter	ø5.8 mm
Magnet Assembly	3480 ± 150 Gauss
Supply Voltage	15 VDC / 6.7A (120V/240V Wall Adapter Included)
Data Interfaces	Ethernet and USB
Screen	8.4" Touchpanel display with Windows 7 Embedded DVI/HDMV/VGA
Dimensions	12" x 12" x 12" Case

SAMPLE RESULTS

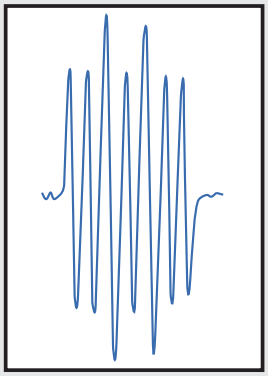


Figure 1:
PTIO-NO• Spin Adduct

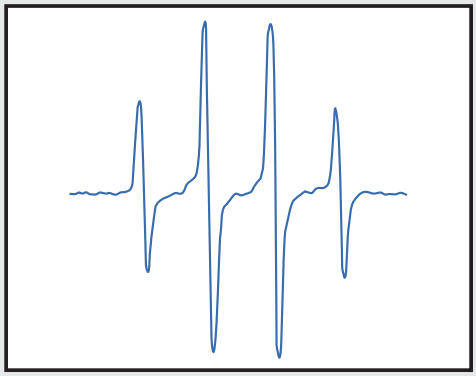


Figure 2:
DMPO-OH• Spin Adduct

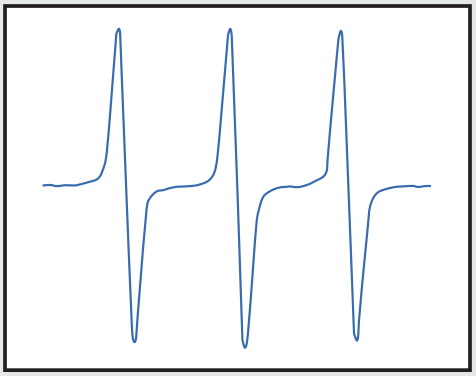


Figure 3:
50 µM aqueous TEMPOL in 1 mm capillary
Detection Limit: 0.1 uM in aqueous solution

FEATURES

Data Interface

Sample Insertion

Touchpanel Display

AVAILABILITY

Please contact us at +1 650-212-2625 or sales@activespectrum.com to discuss your application in more detail.

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