

Benchtop Micro-ESR™



Active Spectrum introduces 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 either 3.4 GHz or 9.5 GHz with a sweep range of up to 400 Gauss and sub-micromolar sensitivity.

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

Active Spectrum's Benchtop Micro-ESR™ spectrometer is targeted for use in industrial and academic labs and educational institutions. Some sample applications are:

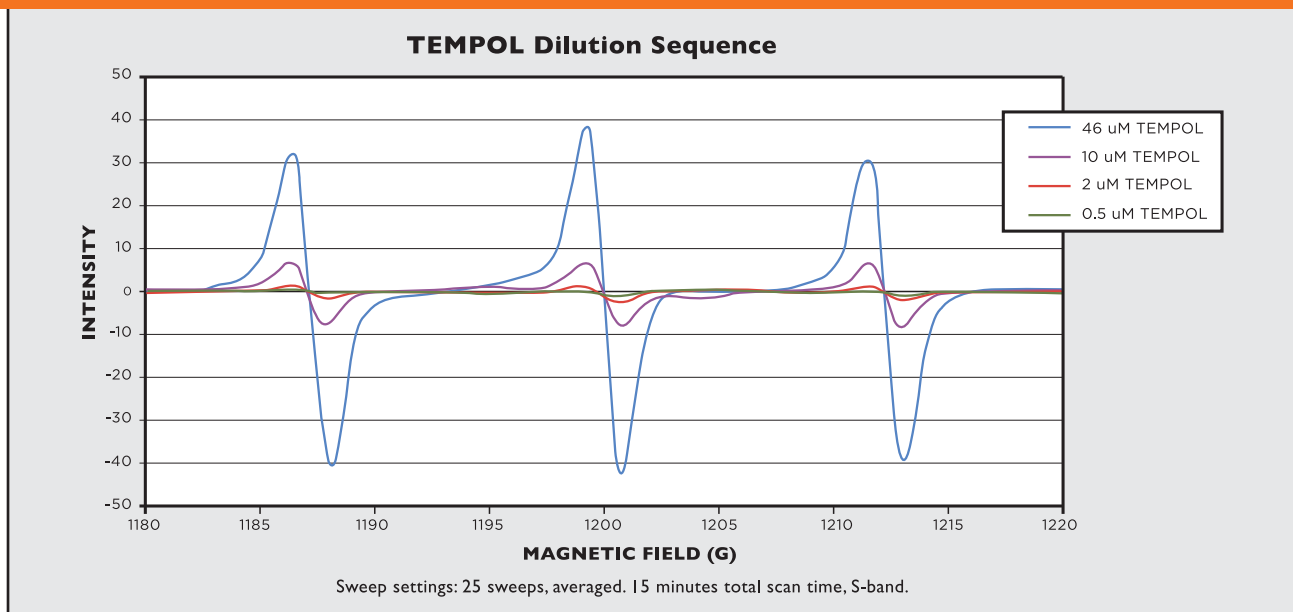
- Crude oil analysis: asphaltene and vanadium content
- Lubricants analysis: oxidation of engine oil, hydraulic oil and turbine oil
- Spin-trapping (PBN, TEMPOL, DMPO)
- Shelf life of food products (vegetable oil, beer, wine)
- Biodiesel oxidative stability
- Detection of raw fuel dilution in marine engines
- Thermal coking.
- Soot
- Catalyst coking



SPECIFICATIONS

Parameter	S-band (3.5 GHz)	X-band (9.5 GHz)
Sensitivity	0.5 μ M (aq)	0.1 μ M
Sample Tube diameter	\varnothing 2.4 mm	\varnothing 5.8 mm
Minimum sample volume	25 μ L	100 μ L
Magnet Assembly	1180 \pm 135 Gauss	3480 \pm 200 Gauss
Magnetic Field Uniformity	0.25 Gauss	0.25 Gauss
Supply Voltage	15VDC / 6.7A (120V/240V Wall Adapter Included)	
Data Interfaces	Ethernet and USB	
Screen	8" Touchpanel display with Windows XP Embedded	
Dimensions	10" x 10" x 11.25" Case	

SAMPLE RESULTS



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.