

SPINSCAN X

INTENDED FOR STUDYING PARAMAGNETIC SAMPLES THAT HAVE UNPAIRED ELECTRONS



VERY USEFUL AND POWERFUL TECHNIQUE FOR



CHEMISTS, PHYSICISTS, BIOLOGISTS,
MATERIAL SCIENTISTS



NANOTECH GROUPS



FREE RADICAL CHEMISTRY
AND BIOTECHNOLOGY GROUPS



QUALITY FOOD CONTROL LABS, INDUSTRIAL
IRRADIATION PLANTS AND DOSIMETRY LABS



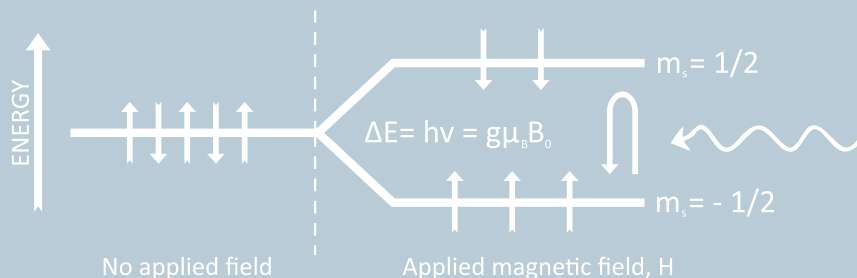
TEACHERS, GRADUATE
AND POSTGRADUATE STUDENTS








DESKTOP ANALYTICAL INSTRUMENTS

ADANI SPINSCAN X EPR SPECTROMETER IS UNIQUE BENCHTOP INSTRUMENT AVAILABLE FOR THE EXAMINATION OF THE RADICALS AND PARAMAGNETIC CENTERS IN LIQUID OR SOLID PHASES

Electron Paramagnetic Resonance (EPR), or Electron Spin Resonance (ESR) spectroscopy utilizes microwave radiation to probe species with unpaired electrons, such as radicals, radical cations, and triplets in the presence of an externally applied magnetic field.



HIGHLIGHTS

-  COMPACT DESIGN OF ELECTROMAGNET AND MICROWAVE BRIDGE
-  HIGH SENSITIVITY AND RESOLUTION - RESEARCH GRADE EPR SPECTROMETER
-  BUILT-IN FREQUENCY COUNTER AND AUTOMATIC g -FACTOR MEASUREMENT
-  MOST CAPABILITIES OF LARGE SPECTROMETERS ARE AVAILABLE - GOOD EDUCATIONAL PRACTICE
-  OPTIMIZED MAGNETIC FIELD: ACCURATE, STABLE AND HOMOGENEOUS



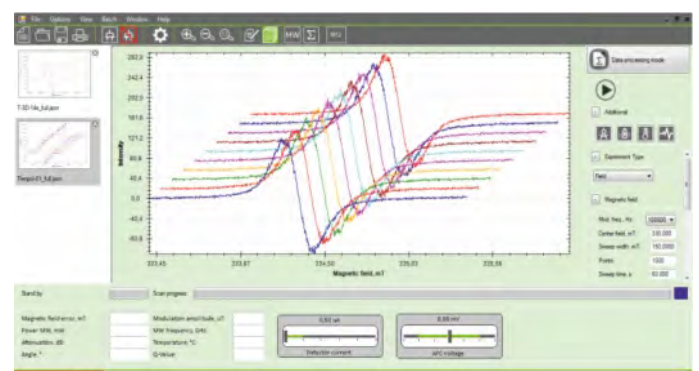
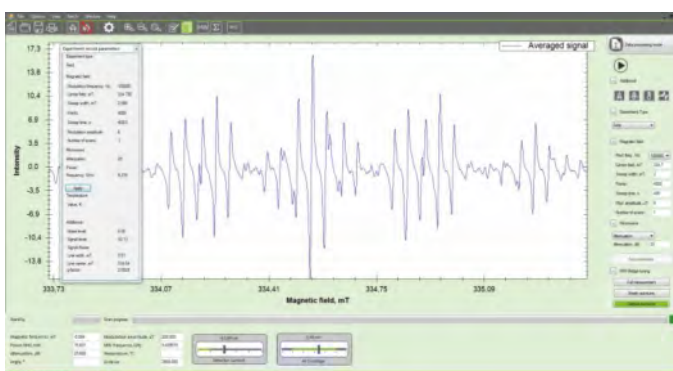
TODAY **ADANI SPINSCAN X** ALLOWS EPR TECHNIQUE TO BE AVAILABLE FOR ANY LAB DOING ROUTINE RESEARCH OR FOR TEACHING DUE TO ITS COMPACT SIZE, HIGH CAPABILITY AND REASONABLE PRICE

PRODUCT KEY FEATURES

- Fast and precise analysis
- Compact, ergonomic design with a small footprint
- Does not require any complicated or time-consuming
- Sample preparation
- Ready-to-plug-in and service friendly instrument
- Robust functionality in routine procedures
- PC-controlled and fully automated operation with optimized software package
- Apps for kinetic, electrochemistry and dosimetry/own experiment scenario development for time saving
- Upgradable

BENEFITS

- Cavity Q-factor and MW power measurement
- Phase detection range 0-360°
- First and second harmonics detection (in phase and out of phase)
- Broad signal channel dynamic range - digitization up to 140 dB per one scan
- Autotune and auto self test of the system
- SMA ports for external peripheral devices (external synchronization and analog signal inputs)
- ADANI e-SPINOZA software - the new comprehensive user-focused software kit for data acquisition and processing
- 2D, 3D - experiments (time, temperature, MW power, ampl. modulation vs magnetic field)
- Interface via Ethernet
- Time-resolved EPR with laser pulse, magnetic field, MW power triggering (time resolution - 2μs, sample rate from 1Hz)
- New ergonomic design



SPINSCAN X

EPR TECHNIQUE APPEARS AT THE CROSSROAD OF LIFE SCIENCE, CHEMISTRY AND PHYSICS. USE THIS INTERDISCIPLINARITY TO LOOK TOWARD THE FUTURE.

READY SOLUTIONS FOR VARIOUS APPLICATIONS:

- ELECTROCHEMISTRY - EPR electrolytic cell
- PHOTOCHEMISTRY - window and accessories for UV irradiation
- CONTINUOUS FLOW CHEMISTRY - flow-through system
- REDOX KINETIC MEASUREMENTS - stopped-flow system
- TEACHING - educational kit

OPTIONAL

- SYSTEMS FOR TEMPERATURE CONTROL IN THE RANGE FROM -180°C TO +600°C
- ALL AVAILABLE ACCESSORIES FOR X-BAND EPR SPECTROSCOPY
- ENDOR & PULSE READY (in prospect)

Sensitivity	8x10 ⁹ spins/0,1mT	MW bridge and cavity tuning	Automatic
Resolution	0,005 mT	Cavity	TE ₁₀₂
Maximum magnetic field	0,7 mT	Q unloaded	5000
Sweep width	10 ⁻⁴ -0,65T	Amplitude resolution	24 bit
Operating Frequency	X-band	Dimensions	470 x 380 x 260 mm (18 x 15 x 11")
Microwave power	0,01-200 mW	Weight	45 kg (100 lb)
Magnetic field modulation	10-250 kHz		

ACCESSORIES AVAILABLE FOR EPR SPECTROMETER SPINSCAN X



Automatic temperature control system



Flow through system



Automatic sample changer set

0504-AA19022020

ADANI



With continual development of our products ADANI reserves the right to make changes to the design and specifications at any moment and without notice