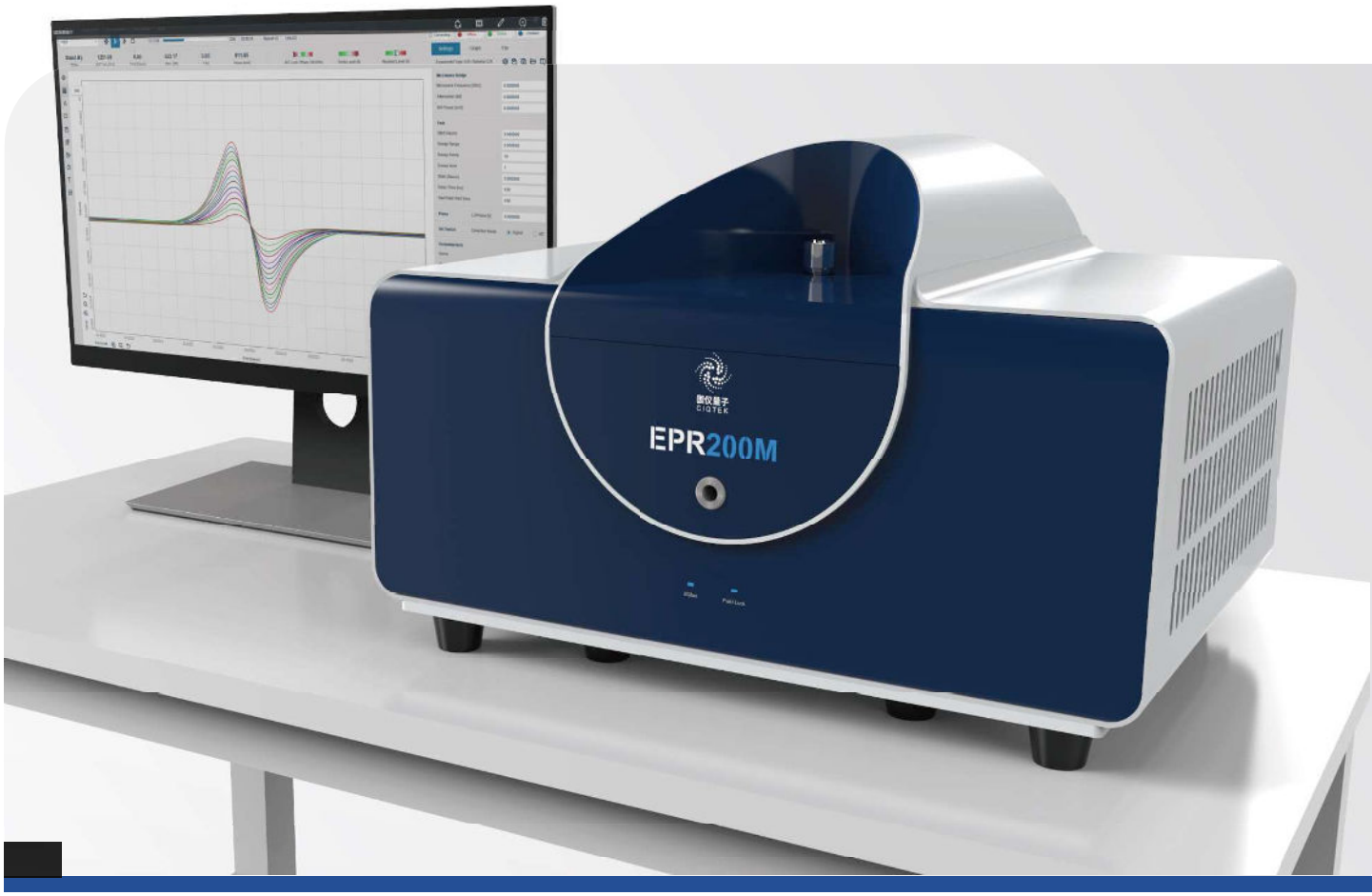
用 量 子 技 术 感 知 世 界
FEEL THE WORLD IN A QUANTUM WAY

国仪量子
CIQTEK



Desktop EPR

Electron Paramagnetic Resonance Spectrometer
EPR200M

Desktop Electron Paramagnetic Resonance Spectrometer --- EPR200M

Product Introduction

EPR200M is a newly designed and ergonomically compact desktop electronic paramagnetic resonance spectrometer. On the basis of dedication to high sensitivity and high stability, provide a super cost-effective, simple and friendly experience for every scientific research or industrial user who needs EPR testing.

Product Features

- High sensitivity, accuracy, stability
- Support manual and automatic tuning
- Integrated instrument control software, data processing software and spectrum fitting software
- Customized software package: application for radiation dosimetry
- Standard sample for accurate g measurement and quantitative EPR measurement
- Multifunctional accessories: low temperature measurement, angle device, light

Product Parameter

Parameter	Value
Frequency Range	9.2-9.9GHz
Modulation Field Amplitude	10 Gauss
Magnetic Field Range	6500 Gauss (Max)
Uniformity ofmagnetic field in sample area	Better than 50mG
Detection SN ratio in continuous wave mode	Better than 600:1
Absolute spin number sensitivity	5×10^{9} spins/(G$\sqrt{Hz}$)
Light Window	Support
Low Temperature Test	100-475 K or optional
Auto Tuning	Support
Scan Speed	10ms/P～5s/P
g-value Standard Sample	Internal
Quantitative EPR test Microwave	Internal standard sample Mn
Power Range	1 uW-l00mW
Modulation Field Frequency	10 kHz/ 100kHz
Weight	50 kg
Size	530mm*420mm*354mm

Product Application

Unpaired electrons are widely distributed, such as isolated single atoms, conductors, magnetic molecules, transition metal ions, rare Earth ions, ion clusters, doping materials, defective materials, biological free radicals, metal proteins, etc.; many substances do not contain themselves unpaired electrons will produce unpaired electrons after being excited by light. Therefore, electron paramagnetic resonance technology is widely used in physics, chemistry, biology, materials, industry and other fields.

Environment Science: Environmental monitoring such as air pollution. sewage treatment, transition metal heavy metals, EPRFs.

Chemistry: Coordination compound structure research, catalytic reaction, free radical detection, reactive oxygen species detection, chemical reaction kinetics, etc.

Physics &Material: Single crystal defects, magnetic material properties, semiconductor conductive electrons, solar cell materials, polymer properties, fiber defects, etc.

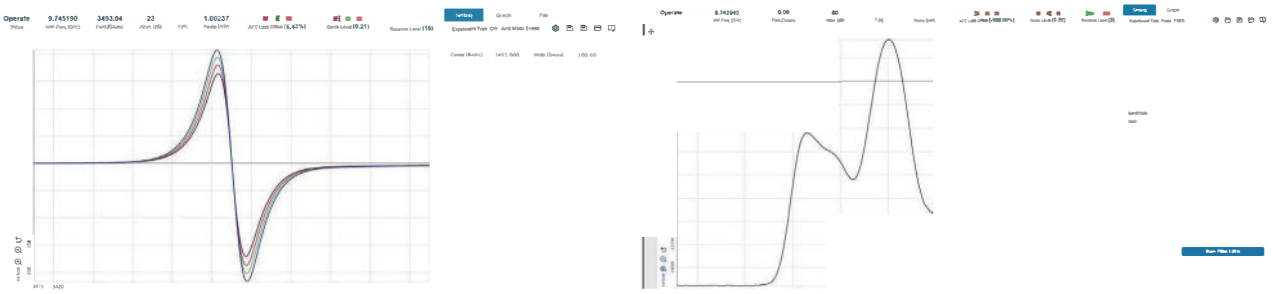
Biomedical: Antioxidant characterization. nitrogen oxide detection, reactive oxygen species ROS, oαupational disease protection research, nuclear radiation emergency medical rescue diagnostic classification, cancer chemotherapy and radiation related research.

Food Science: Agricultural product irradiation dose, beer flavor preservation period, edible oil rancidity test, alanine dosimeter, food and beverage antioxidant.

Industry : Coating aging research, cosmetic free radical protection coefficient, diamond defect identification, tobacco filter efficiency, free matrix controlling petrochemical industry.

Product Software：EPR-PRO

EPR-PRO is the operating software of EPR Spectrometer, which provides fast experimental operation procedures and scientific data analysis functions.



Software Features

01 Modern design style, simple and elegant interface

02 Separate data analysis software for offline use

03 Scienti

04 Automatic experiment report generation

Product Affiliated

Liquid nitrogen variable temperature

Liquid nitrogen dewar

Light system

Standard sample

4 mm outer diameter sample tube, flat cell

Automatic corner device

国仪量子
CIQTEK