

## Simply Complete

The new EMX-Plus Console houses newly developed devices, interfaced via Ethernet

### The Perfect Duo I

The new Signal Channel and Field Controller work together seamlessly. They provide practically unlimited resolution in both axes: field and signal intensity.

### The Perfect Duo II

For the first time, the EMX-Plus Signal Channel offers two detection channels in one. Simultaneous Quadrature and 1st & 2nd harmonic detection schemes are just a mouse click away.

### The Perfect Duo III

The next generation PremiumX microwave bridge with integrated controller matches the characteristics of the High-Sensitivity Resonator.

## Selected Key Specifications

The EMX-Plus provides top-notch sensitivity not only according to the international Weak-Pitch protocol but for virtually every application.

### The Sensitivity

Guaranteed Sensitivity: S/N (Weak Pitch) > 1500: 1  
Guaranteed Absolute Sensitivity:  $2 \times 10^9$  Spins/Gauss  
Concentration Sensitivity: 5 pM ( $5 \times 10^{-12}$  mol/l)

### The Resolution

Digital Resolution (Field) : 24 bit  
Digital Resolution (Signal): 24 bit

### ... And More

Microwave Frequency Counter, standard  
High-Sensitivity Resonator with irradiation window  
DHCP/Ethernet network

# EMX | | | plus

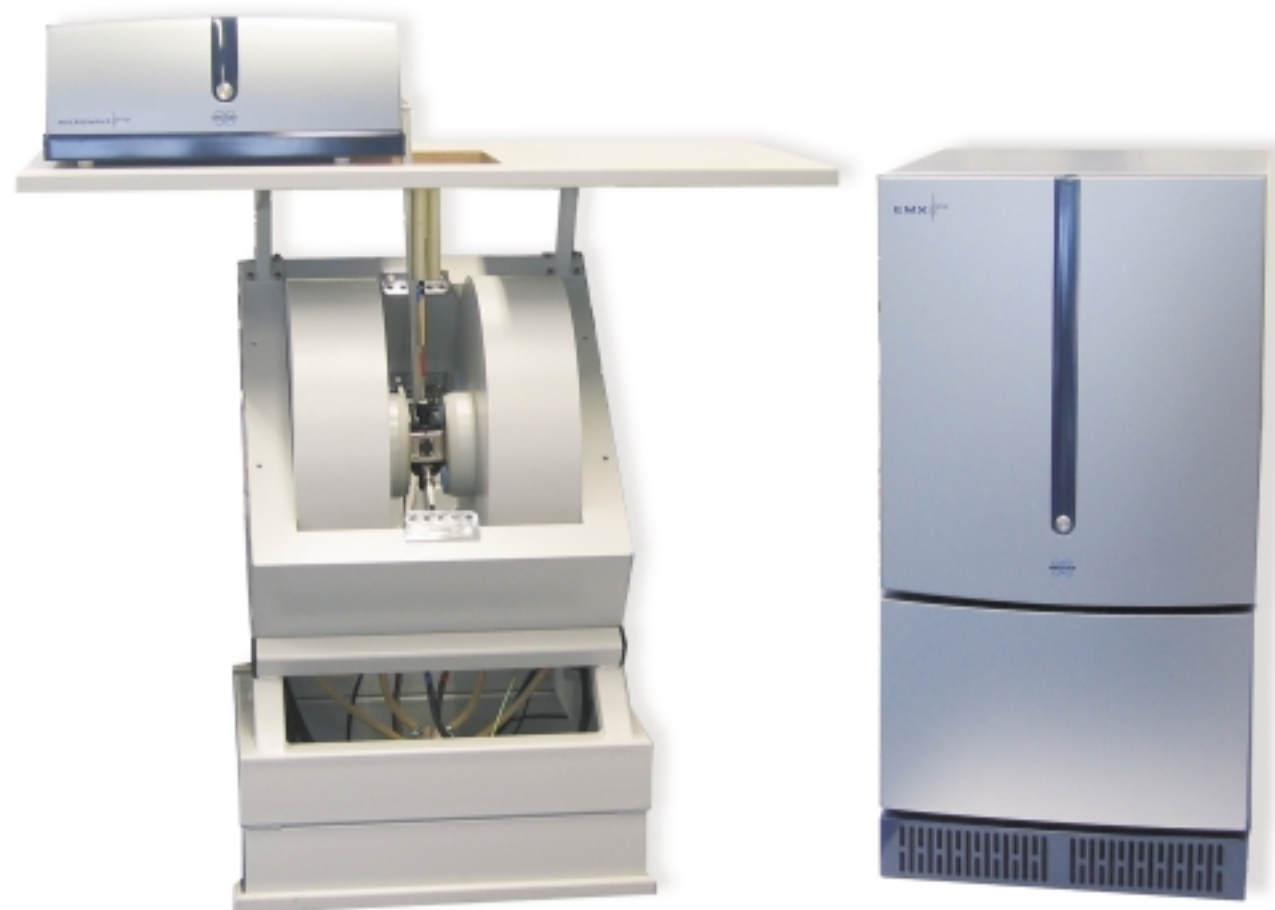
## The Pulse of Innovation

## Form follows Function

The EMX-Plus is the next generation of Bruker's successful EMX spectrometer line. The EMX line is well-known for its premium performance in routine EPR research.

The new design of the EMX-Plus reflects its concentration and dedication to the heart of the EPR spectrometer's purpose:  
The analysis of the sample right at the center.

Simply power-on the EMX-Plus via the front-button of the console to start your EPR endeavour. Following self-validation of the devices, the EMX-Plus is ready to use via Bruker's new WizEPR software.

# WIZ | | | EPR

## The Software

### Acquire & Go

Today's task of any software is to make optimal use of the hardware without having to know all the ins & outs. Bruker's response to this is called WizEPR, a new approach in EPR research.

### From the Experts, for Everybody

WizEPR offers a Fully Guided Acquisition & Processing with Reporting. Ultimate flexibility is provided in the Expert and off-line Viewing & Processing modes, resp.



## Selected Software Features

WizEPR comes with a suite of new tools to support all scientists to obtain reliable results in time and every time:

#### PilotScan with GainGuard

Based on the sample properties, a PilotScan EPR-spectrum will be recorded with meaningful parameters while GainGuard automatically optimizes the receiver gain.

#### g2adjust

Most radicals exhibit a g-factor of around  $g = 2$ . WizEPR will take care of always setting the magnetic field to the resonance position given by the resonance frequency.



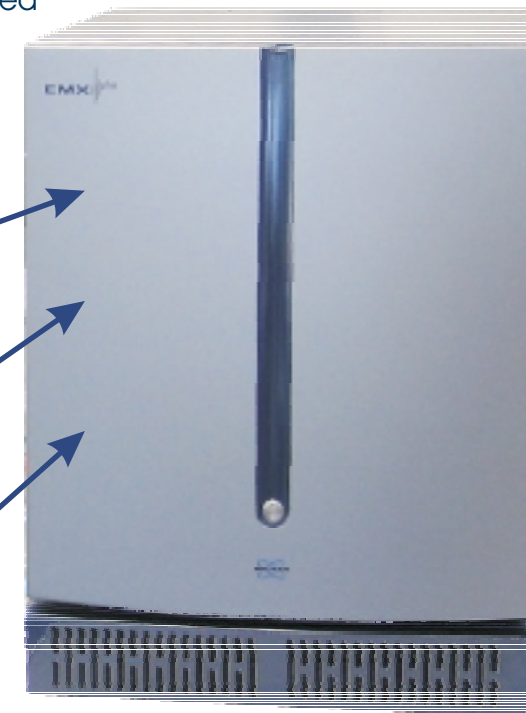
## Boost your System with Accessories from Bruker

The interior of the EMX-Plus console is already prepared for your future application demands.

**Variable Temperature Control**  
A newly developed temperature control unit (TCU) can be incorporated into the new EMX-Plus console

**The ER036TM Teslameter**  
For precise g-factor determination in combination with the PremiumX microwave counter

**EMX-ENDOR with the EMX-Plus**  
For the first time, CW-ENDOR experiments can be utilized on EMX Systems



The New EPR Philosophy

## Service & Support by Bruker

Bruker BioSpin's instruments are intended to provide years of trouble-free operation, but should a problem occur, a world-wide network of Service and Application is ready to respond to your needs.

The understanding of Bruker's EPR division is to offer direct access to Application and Service specialists. Customer training courses take place on a regular basis for the benefit of the instrument users.



## Contact

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