

Feature of the ECA series FT NMR System

JEOL LTD

The ECA NMR System provides a new level of flexibility and performance for the NMR user experience. The ECA System can be expanded to provide high-performance liquid. Multiple channel protein, solid-state and imaging spectroscopy in a single instrument platform.

Highest Magnetic Field Available

The ECA NMR System is available from 300 to 920MHz with a variety of magnet bore sizes. Furthermore, the ECA spectrometer is engineered to operate up to 1GHz proton frequency in anticipation of the future availability of 1GHz NMR Magnets.

Expandable RF Channels

The ECA has modular, expandable RF architecture enabling a single spectrometer to be equipped with up to 10 RF channels. All RF synthesis and transmitters are fully broadband. The RF design of the ECA is very flexible, providing the user the ability to easily perform a wide variety of NMR experiments.

Fully Digital RF for Maximum Stability

Using recent advances in high-performance semiconductors, the ECA system is fully digitally synthesized amplitude. The ECA uses hierarchical digital sequencer pulse generator architecture to maximize performance and flexibility. To maximize NMR sensitivity, the ECA spectrometer also uses the latest advances in low-noise, high performance preamplifiers.

Hyphenated Techniques

Combining NMR with other analytical techniques is one of the newest areas of NMR research and enables rapid, more efficient analysis. The ECA system supports hyphenated techniques such as LC-NMR and LC-NMR-MS.

NMR Probes

The ECA NMR system can be expanded with a full complement of NMR probes, including the JEOL Auto Tune probe, to satisfy virtually any application. Auto Tune probe technology allows automatic computer-controlled tuning over the entire probe operating range. An entire

suite of probes are available, including 3mm,5mm,10mm,3-channel probes, pulsed field gradient, 3-axis gradient, LC-NMR, CPMAS and cryogenic probes.

Delta Software

Advanced DELTA NMR software provides the JEOL NMR user with an easy training and migration path from other JEOL NMR Systems. The DELTA NMR software offers full, distributed network operation for data transfer.

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JEOL is a world leader in instrumentation for high-end scientific and industrial research and development. Core product groups are analytical instruments, including mass spectrometers, NMRs and ESRs, electron microscopes(SEMs and TEMs), instruments for the semiconductor industry (electron beam lithography and series of defect review and inspection tools).

