AV-300

AV300 is primarily used for 1D 1H and X-nuclei observation. Along with the AV301 system it forms the workhorse pair for synthetic organic and polymer chemists who need a user-friendly NMR that can provide quick but reliable and accurate fingerprint spectra of the compounds they synthesize. The system is capable of variable high temperature studies in an automated manner and is well suited for chemical kinetics and relaxation dynamics studies as well. 2H can be observed readily with 2H pass preamp, with only one RF cable connection change. The system runs on a dedicated Bruker multinuclear probe, which provides excellent 1H and X nuclei spectra. Popular nuclei of observation are: 13C, 31P, 2H and 11B.

Features

- Bruker state-of-art AVance series instrument
- 1H Frequency: 300.13 MHz
- 2H field-frequency lock system
- MAGNET and Shim system
  - Oxford Cryomagnet
  - BOSS2 shim system
  - 20 RT shim gradients
  - BSMS/2 keyboard
- Runs on Topspin 2.1, includes ShapeTool and NMRSim
- Host Operating System: Red Hat Enterprise Linux 5.3
- VT range: +25C to + 50 C (nominal)
- RF Section
  - Two channels (SGU1 and SGU2)
  - 50 W 1H amplifier
• 200W X amplifier
• HPRR/2-2HS preamp.

• Digital
  • Digital quadrature detection
  • 5 MHz sampling rate ADC
  • Waveform generation, Ai selective and shifted frequency shaped pulses capable.

• Data
  • Data is stored on individual user's udrive system.

Available Probes

• Bruker PABBI : X (1H) - multi nuclear (currently installed)
• Bruker TXD : 19F (1H,13C)
• Bruker BBI : X (1H) - multi nuclear
• Bruker double resonance inverse : 1H (13C)

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Source URL: https://chem.washington.edu/instruments/av-300