DSPECT

Pulse Programmer
- DSP(Digital Signal Processor)-based
- 300 ns minimum pulse width
- 33 ns timing resolution
- 1024 sequence events
- Hardware and software looping; unlimited number of loop counters
- No hidden delays
- WYSIWYG graphical pulse sequence creation and editing
- Fast minimum acquisition recycle delay of 1 µs
- External trigger
- Extra user-assignable control lines (expandable in-groups of 24)

Signal Averager
- Embedded PowerPC
- 32-bit 256 Mbytes (512 x 256 x 256) memory; expandable to 1 Gbyte
- Dedicated ultra-fast real-time display memory for adjusting instrument control settings and experiment monitoring

Digitizer Options
- 12-bit 1 MHz spectral width (1 µs per complex point)
- 16-bit 500 kHz spectral width (2 µs per complex point)

Bruker Interface Modules
- Plug-compatible with the original cables of the Bruker AC or AM spectrometer: P2, P1, I3, A1 and SDC (slow device channel)
- Designed to be installed without any tools or modifications to the Bruker spectrometer
- Retains all the existing functions including the use of the SCM (System Controlled Microprocessor)
- DDS offset oscillators: O1, O2
- Fourier filters
- Slow device channel (SDC)
- SCM interface cable
- Lock display upgrade kit allowing the lock to be displayed on the Windows XP computer monitor in an independent resizeable window

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Computer Option
- External mini-tower Dell Optiplex GX755
- Core 2 Duo 2.2 GHz processor with 800 MHz system bus
- 2 Gbyte of RAM, DDR2
- 250 Gbyte 7200 rpm SATA II hard disk
- 16xDVD+/-RW SATA drive
- 256 Mbyte ATI Radeon HD 2400 XT, dual monitor PCI Express video card
- 10/100/1000 Base T Ethernet (RJ-45 port)
- AC'97 Audio
- Windows XP Professional SP2
- Dell USB keyboard
- Dell USB Optical Mouse with scroll
- Fast FFT, 1k x 1k in < 1s; 256 x 256 x 8 in < 0.5s
- High-speed (480 Mbits/s) USB 2.0 interface to the pulse programmer and signal averager

    The LCD monitor is sold separately and can be purchased
    from Tecmag or other vendors.

- NTNMR software site license for instrument control and processing of spectroscopy data

- NMRscripts for automating any task. Includes a suite of NMRscripts

- Pulse sequence library of routine 1D and 2D experiments

Environmental
- Cooling - Internal forced air
- Operating temperature - +15°C to 30°C with a humidity range of 20% to 80%
- AC line voltage - 230 VAC, ±10%, single phase, 47-63 Hz, 0.5 KVA; plugs into the rear AC/AM power strip.
- 19" rack mount chassis with an optional external minitower computer.