HNF | HOWARD NANOSCALE SCIENCE & ENGINEERING FACILITY

EQUIPMENT SPECS

Howard University | National Nanotechnology Infrastructure Network (NNIN)

Bruker Optics TENSOR 27 FT-IR

Designed to provide versatility and high performance, the TENSOR series sets new standards in FT-IR laboratory analysis, offering a multitude of automatic features, easy operation and quality components. TENSOR Series FT-IR Spectrometer can rapidly identify, quantify and verify your routine samples. It combines the highest performance and outstanding flexibility with an intuitive and easy to operate interface.

Features:

- **Spectral Range:**   7,500 to 370 cm-1 , with standard KBr beamsplitter

- **Resolution:**   Better than 1 cm-1 (apodized), optional better than 0.5 cm-1 (apodized)

- **Wavenumber Accuracy:**   Better than 0.01 cm-1 @ 2,000 cm-1

- **Photometric Accuracy:**   Better than 0.1% T

- **Signal-to-Noise (Minimum):**   5 Sec: >6,000:1 (= <7.2*10-5AU noise) peak-to-peak, 4 cm-1 resolution

- **Interferometer:**   RockSolidTM, Permanent aligned, high stability

- **Scan Speed:**   3 velocities, 2.2 - 20 kHz (1.4 - 12.7 mm/sec opd)

- **Detector:**   DigiTectTMdetector system, High sensitivity DLATGS

- **A/D Converter:**   24 bit

- **Validation:**   IVU internal validation unit