**Spectrometer FT-IR Brucker**

Infrared spectrometer FT-IR VERTEX 80v by BRUKER

Spectral range covered: 15000 - 8 cm^-1 (666 nm - 300 GHz).

Possibility of measurements in temperature range of 4-500K - sample in vacuum.

Measurements in transmission and reflection modes.

PL module to measure samples at 4-500K - sample in vacuum. The module allows us to measure radiation emitted from external sources.

The VERTEX 80v vacuum FT-IR spectrometer is based on the actively aligned UltraScan™ interferometer, which provides PEAK spectral resolution. The precise linear air bearing scanner and PEAK quality optics guarantees the ultimate sensitivity and stability. The VERTEX 80v is an evacuated optics bench that can eliminate atmospheric moisture absorptions for ultimate sensitivity and stability; enabling demanding experiments such as high resolution, step-scan, or THz spectral range measurements.

The VERTEX 80v optics design allows PEAK flexibility and at the same time PEAK instrument performance. The unique Bruker Optics DigiTect™ technology prevents external signal disturbance, guarantees PEAK signal-to-noise ratio and allows easy and reproducible detector exchange by the instrument user. The external detector port accommodates the liquid He dewar of bolometer. In combination with the external water cooled high power Hg-arc source, the recently rediscovered terahertz spectral range is accessible even with a room temperature operated DTGS-detector.

