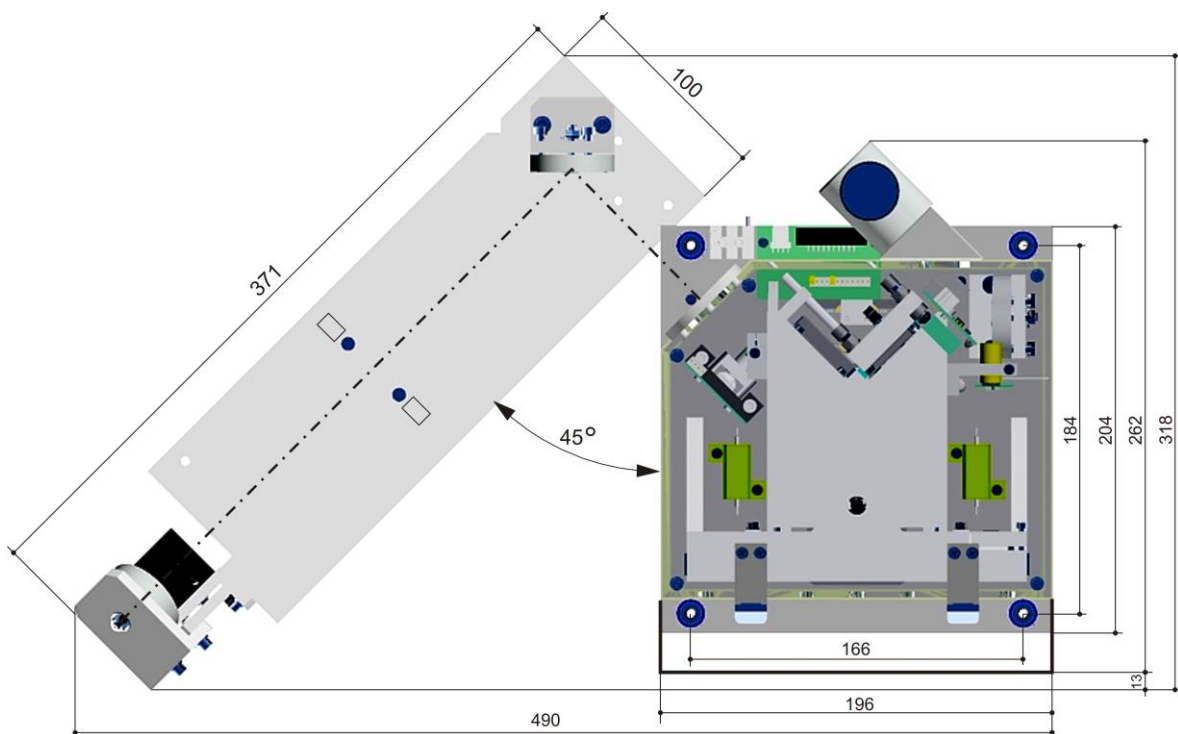
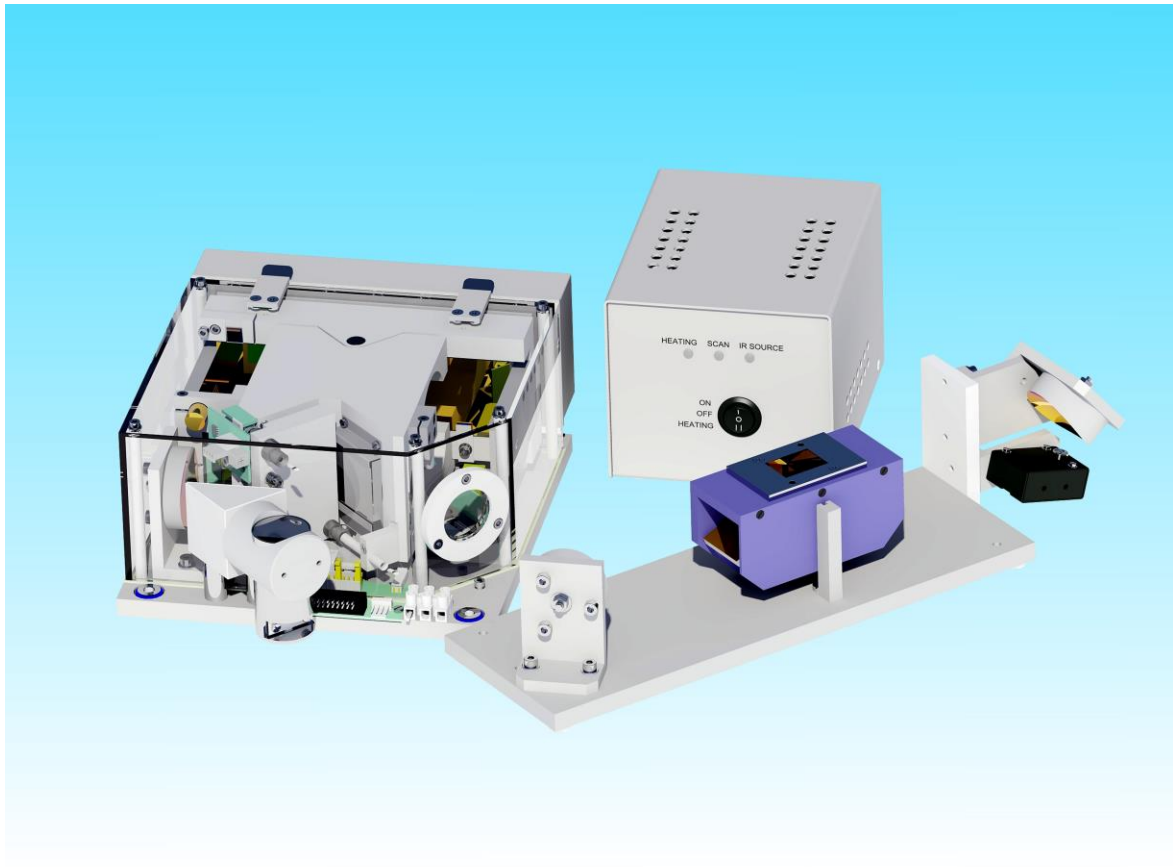


# Educational FTIR/FTNIR modular spectrometer Interspec 408



Interspec 408 is an educational Fourier transform infrared (FTIR) modular spectrometer for teaching spectroscopy in the science and university labs to promote the use of infrared spectroscopy as a general-purpose, broad-based measurement tool, and to enable the use of state-of-the-art FTIR technology for teaching and science purposes. With the wavenumber range from 7000 to 400  $\text{cm}^{-1}$  and spectral resolution of 2  $\text{cm}^{-1}$ , the interferometer module with detector system, power supply and data acquisition system forms an open architecture sample compartment modular spectrometer capable to use most of FTIR accessories available in the market. It makes the instrument very flexible for different kind of applications in science and teaching lab. The interferometer module has a transparent plastic cover to allow visual access to all of it's major parts, 25-mm collimated output beam, a multicoated KBr beamsplitter, a high-intensity ceramic IR source, and an USB interface. FTIR spectroscopic software Interspec for Windows is a program for running the spectrometer and for complete handling of measured infrared data.

### Specifications:

|                             |   |
|-----------------------------|---|
| Wavelength range, IR        | 7000 to 400 $\text{cm}^{-1}$  |
| Wavelength range; NIR       | determined by detector: 14000-5800 $\text{cm}^{-1}$ or 9000-3850 $\text{cm}^{-1}$ |
| Resolution                  | 2 $\text{cm}^{-1}$  |
| Frequency reference         | VCSEL laser   |
| Interferometer              | Pendulum type with roof mirrors   |
| Output beam diameter        | 25 mm   |
| Optical axis height         | 55 mm   |
| Data acquisition system     | 18 bit, high speed  |
| Software                    | Windows based   |
| Interface                   | USB 2.0   |
| Power                       | 12 VDC, 30 W  |
| Size, interferometer module | 262x196x100 mm  |
| Size, "sample compartment"  | 371x100x80 mm   |
| Weight                      | 6 kg  |

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