



FTIRzz Specifications

Fourier-transform MIR spectrometer

Fastlite FTIR spectrometer is a new product dedicated to the spectral characterization of MIR sources between 1.6 and 12 μm . A trigger (kHz) and clock (MHz) inputs are integrated to synchronize the acquisition with low repetition rate sources (below 30 kHz), where conventional FTIR spectrometer are not adapted.

Main performances are listed below:

- **Spectral bandwidth:** 1.6-12 μm
- **Spectral resolution:** down to 2.5 cm^{-1} (adjustable)
- **Minimum laser rep rate:** 1 kHz
- **Maximum laser rep rate:** continuous
- **Measurement time at best resolution:** <25s at 1kHz, <4 s at 10 kHz, <1 s at 100 kHz and above
- **Minimum pulse energy:** <10 nJ
- **Input polarization:** random
- **Input aperture:** free-space, 5 mm diameter. 4 inches height
- **Input window:** BaF₂, uncoated
- **Dimensions:** L 274 x W 225x H 153 mm

Preliminary data obtained on a 250 kHz OPA between 2.7 and 5.5 μm are shown below.

