

ARCspectro FT-MIR

ARCOptix
Switzerland

DATA SHEET



Compact fibered MIR 2.0-6.0 μm Fourier-transform spectrometer

The FT-MIR “Rocket” is a fibered MIR spectrometer (2-6 microns wavelength) that is easily coupled to accessories using mid-infrared CIR fibers. It incorporates ArcOptix’s 3rd generation new self-compensated interferometer, using a solid-state internal reference laser. The system features excellent sensitivity using a 2-TE cooled MCT detector, stability and wavelength reproducibility.

Typical characteristics of the FT-MIR series are :

- **Compact (world smallest FT-MIR)**
- **Broad spectral range 5000-1600 cm^{-1} (2.0–6.0 μm)**
- **Fiber input (SMA-905)**
- **High resolution of 4 cm^{-1}**
- **Cost-effective**

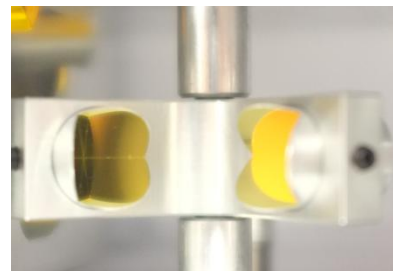
Typical applications of the FT-MIR series are :

- **Chemometrics**
- **Material identification**
- **Laser characterization**
- **Gas analysis**

For additional information please contact:
info@arcoptix.com

www.arcoptix.com

www.ftir-spectrometer.com



FEATURES & BENEFITS

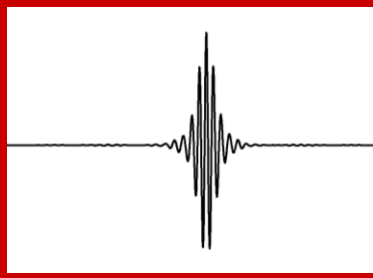
Extreme wavelength range, high resolution and optical throughput are combined in our compact Fourier-Transform spectrometers

High performance interferometer

The ARCSpectro FT-MIR uses a compact yet high-performance, optically self-compensated interferometer.

Solid-state control laser

The use of a solid state reference laser allows our FT-MIR to be cost-effective, while maintaining excellent stability and wavelength reproducibility.

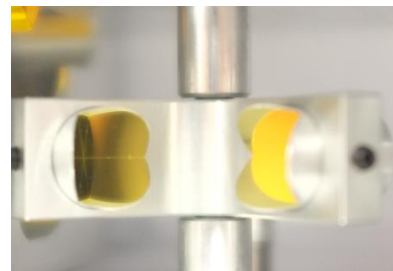


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Spectral range	5000–1600cm⁻¹ (2.0–6.0 μm)
Detector	2-stage TE-cooled MCT (HgCdTe) detector
Resolution	4 cm⁻¹ (unapodized)
Signal-to-noise ratio (SNR)	>10'000:1 around peak sensitivity wavelength, linearly corrected baseline, 60s averaging, with 24W IR light source.
Measurement cycle time	2.5 s (2x1 scans)
Control laser	Solid-state 850nm, thermalized via TEC
Wave-number accuracy	<0.1cm⁻¹ @ 4000cm⁻¹
Optical fiber input	SMA 905, fiber core diameter 550um, NA=0.3
Operating temperature	10 - 40°C
ADC resolution	24 bits
Power requirements	7.5 V / 1.6A (line-powered)
Communication interface	USB 2.0
Included software interfaces	Windows XP/Vista/7/8 software
Size	180mm x 126mm x 78mm
Weight	1800 g



OPTIONS

Detectors

Other detectors with different wavelength ranges are available on request.

FC/PC input fiber connector

For direct connection of MIR lasers

ARCOptix is a company located in Neuchâtel (Switzerland) in the heart of the watch valley.
For more information about ARCOptix, visit www.arcoptix.com or www.ftir-spectrometer.com.
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Specifications are subject to change without notice

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