

## DATASHEET

# ARCOptix FT-IR FC

## FTIR for Fiber-Coupled operation



*The Arcoptix FTIR-FC is a variant of our FTIR Rocket spectrometer especially designed for operation with **mid-IR optical fiber probes**.*

*It is a **plug-and-play** instrument including an IR source, high-stability interferometer, IR detector and fiber couplers.*

*The instrument was especially developed with **process-monitoring** applications in mind, using fibered ATR probes.*

### ▪ Benefits

- All-in-one solution including IR source, interferometer, detector and fiber couplers
- Most compact fiber-coupled FT-IR on the market
- Available with 4-TE or liquid-nitrogen cooled MCT detectors

### ▪ Applications

- Chemical process monitoring with fibered ATR probes
- Remote gas sensing via IR optical fibers

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### Specifications

Models	FTIR-FC-4TE	FTIR-FC-LNC
Spectral Range [cm <sup>-1</sup> ]	5000 – 800	5000 – 625
Spectral Range [μm]	2-12.5	2-16
Detector Type	MCT 4-TE cooled	Liquid nitrogen cooled MCT
Detector D* [cm Hz <sup>1/2</sup> W <sup>-1</sup> ]	>1.5x10 <sup>9</sup>	>3x10 <sup>10</sup>
Interferometer type	Permanently aligned, double retro-reflector design	
Beam-splitter material	ZnSe	
Resolution (unapodized) [cm <sup>-1</sup> ]	4	
Wavenumber repeatability	<10PPM	
Scan frequency	1 spectrum / second	
Reference laser	Temperature-stabilized solid-state laser @850nm	
A/D Converter	24 bit	
Amplifier	4 gain levels low noise trans-impedance amplifier	
Integrated light source	20W SiC globar with electronic stabilization	
Operating temperature	10°C-40°C	
Fiber optic interfaces	Fiber core up to Ø 1mm, NA=0.3, SMA 905 connector	
Purge gas connectors	2 connectors for 4mm OD tubes	
Silica gel compartment	Yes	
Power requirement	12V / 2W (LN cooled) or 6W (4TE version)	
Communication Interface	USB 2.0	
Software Interface	Windows 7/8/10 API for controlling the instrument via our DLL	
Dimensions	180mm x 160mm x 80mm	
Weight	2200 g	

SPECIFICATIONS ARE SUBJECT TO CHANGES WITHOUT NOTICE.