DATASHEET

ARCoptix FT-*FC*
FT-NIR & FT-IR for Fiber-Coupled operation

*The Arcoptix FT-FC is a variant of our FT spectrometers especially designed for operation with **optical fiber probes**.*

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

*The instrument was especially developed with fiber probe based **process-monitoring** applications in mind.*

- ## Benefits
  - All-in-one solution including light source, interferometer, detector and fiber couplers
  - Most compact fiber-coupled FT spectrometer the market
  - Available with InGaAs (2TE) or MCT (TE or LN2 cooled) detectors

- ## Applications
  - Chemical process monitoring with fiber probes
  - Remote gas sensing via IR optical fibers

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- ## Specifications

Models	FTNIR-FC-025-2TE	FTMIR-FC-060-2TE	FTMIR-FC-120-4TE	FTMIR-FC-160-LNC
Spectral Range [cm^{-1}]	4'000 – 11'000	5000-1700	5'000 – 800	5'000 – 625
Spectral Range [µm]	0.9-2.5	2-6	2-12	2-16
Detector Type	InGaAs 2TE cooled	MCT 2TE cooled	MCT 4TE cooled	MCT Liquid nitrogen cooled
Detector peak D* [cm Hz$^{1/2}$W^{-1}]	>1.5 x10^{11}	>1 x10^{11}	>2.5x10^{9}	>3x10^{10}
Beam-splitter material	CaF$_2$		ZnSe	
Reference laser	795nm	850nm		
Power requirement	40W			30W
Integrated light source	20W QTH lamp	20W SiC globar		
Interferometer type	Permanently aligned, double retro-reflector design			
Resolution (unapodized) [cm^{-1}]	4 or 8			
Wavenumber repeatability	<10PPM			
Scan frequency	1 spectrum / second			
A/D Converter	24 bit			
Operating temperature	10°C-40°C			
Fiber optic interfaces	Fiber core up to Ø 1mm, NA=0.3, SMA 905 connector			
Silica gel compartment	Yes			
Communication Interface	USB 2.0			
Software Interface	Windows 7/10 API for controlling the instrument via our DLL			
Dimensions	180mm x 160mm x 80mm			
Weight	2200 g			

SPECIFICATIONS ARE SUBJECT TO CHANGES WITHOUT NOTICE.