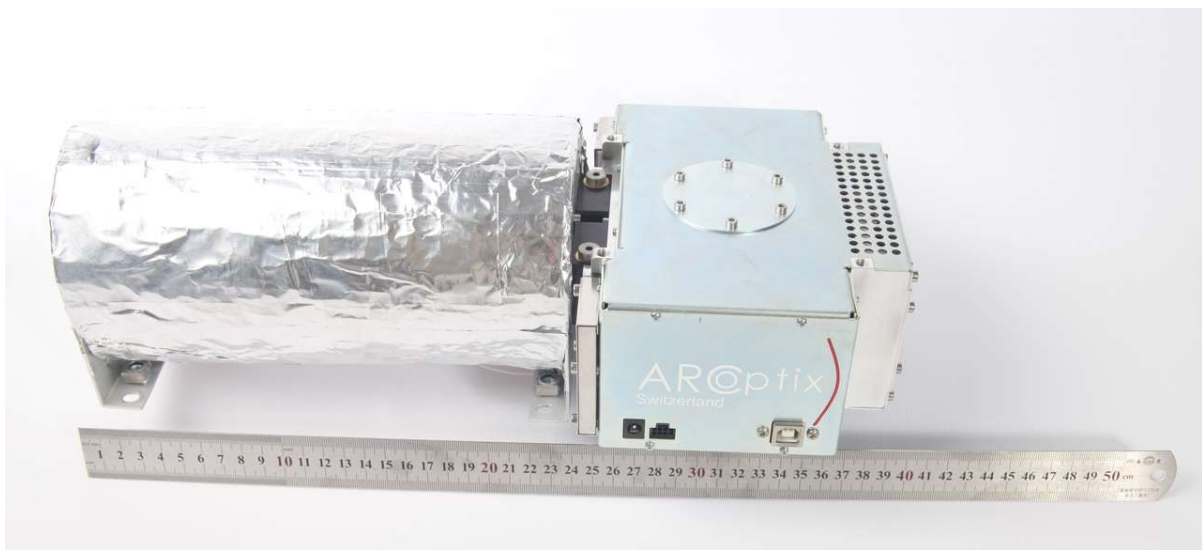


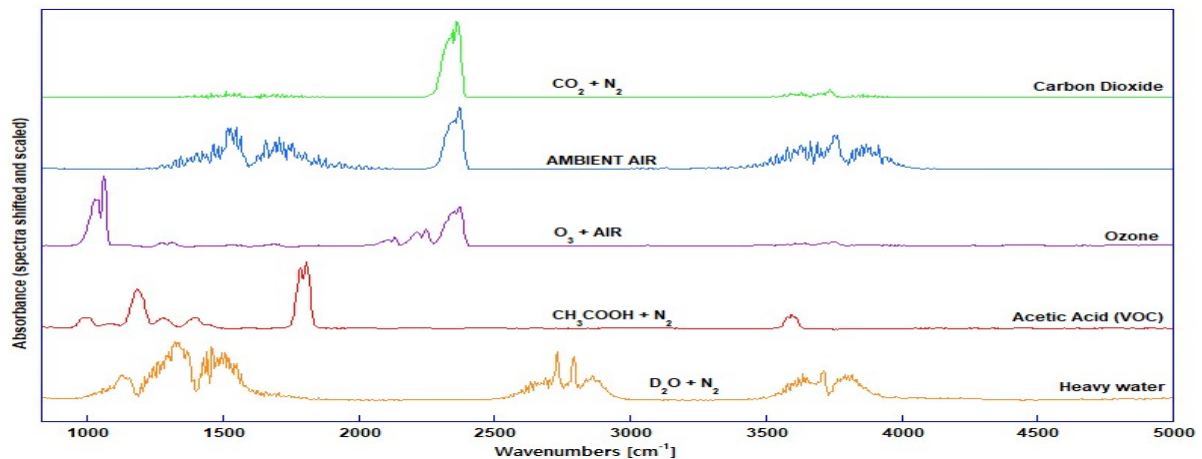


GASEX

FTIR – gas cell system for gas analyzers



GASEX is a powerful tandem of our vacuum tight “Rocket” FTIR core, seamlessly matched to gas cell providing a five meters long optical path in your gas sample. GASEX is a lightweight, rugged and compact System which makes it ideal for conception of new industrial - and field- analytical systems as well as for integration into the state of the art gas analyzers for a vast variety of analytical and long term observation applications.



Gas spectra examples measured with Gasex system.



Features:

Arcoptix S.A. presents Gasex^(TM) - an OEM gas spectrometer, comprising an approved high stability vacuum tight "Rocket" FTIR, seamlessly matched to a 5 meters gas cell, with rhodium coated chemically resistant optics.

- Compact, rugged and high-performance FTIR module with 4TE-MCT detector;
- Long path (5m), low volume (0.2L) heated gas cell seamlessly matched to the FTIR for high sensitivity and very short response time;
- rhodium coated chemically resistant optics;
- Most compact FTIR Gas Analyzer Bench on the market, only 40cm x 19cm x 12cm and 3.8 kg weight.

Application Fields :

- | | |
|--|---|
| • Ambient air (environmental and pollution) monitoring | • Fire fighting |
| • Continuous emissions monitoring (CEM); | • Cement kilns |
| • Engine emissions | • Toxic gas detection |
| • Combustion monitoring | • Petro-chemistry |
| • Food processing | • Process monitoring and control in chemical industry |
| • Security and defense | • Work safety |
| • Agriculture | • Mining |
| • Aerospace | • Laboratory practice |
| • Medical devices; | • Forensic science; |



Specifications:

FTIR	
Design	Permanently aligned, maintenance free, hermetic.
Resolution [cm^{-1}]	4
Beamsplitter / window material	ZnSe
Spectral range [cm^{-1}]	5000 - 830
Detector	MCT (4-TE cooled)
Detectivity D^* [$\text{cm Hz}^{1/2}\text{W}^{-1}$]	$> 2.5 \times 10^9$
Light source	Broadband SiC, 1550 K
Reference laser	Stabilized solid-state laser
Scan frequency [s^{-1}]	1
Signal-to noise ratio	$> 5'000:1$
Operation	Position independent
Absotrans ^(TM)	Active suppression of H_2O and CO_2
GAS CELL	
Path length	5m
Internal volume	0.2L
Transmission	$> 50\%$
Temperature range [$^{\circ}\text{C}$]	-20 to 200 (not condensing)
Construction	Aluminum with inert coating.
Mirrors parabolic,	Rhodium protected, gold coated aluminum
Windows	BBAR ZnSe
Gas connectors	For 6mm or $\frac{1}{4}$ " diameter tubing (customizable)
SYSTEM	
Communication	USB 2.0
Operating system	Windows XP/7/8/10
API	Windows DLL instrument control and data retrieval
Power consumption	FTIR only: 30W @ 12VDC Gas cell heaters: 400W (peak) @ 110-230VAC (50-60Hz) (customizable)
Dimensions [mm]	380 x 180 x 120
Weight	3.8 kg