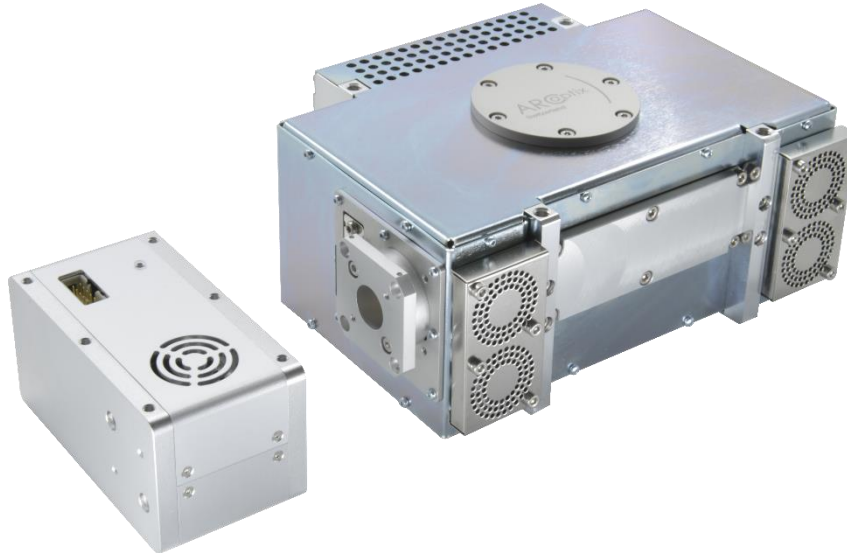
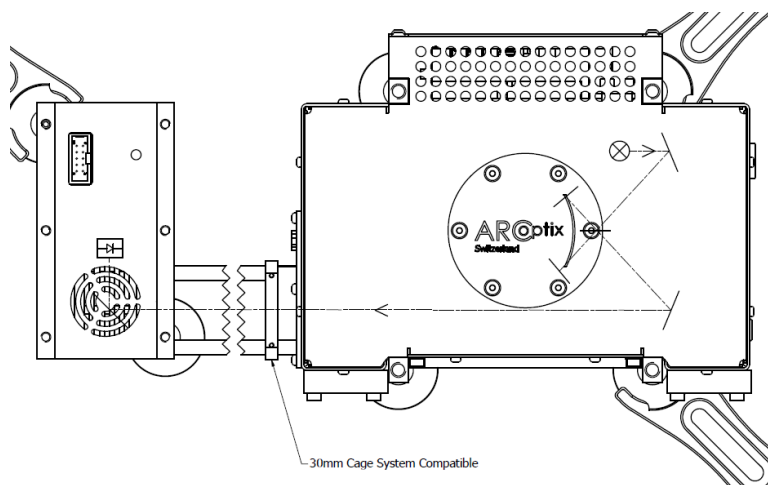


ARCOPTIX OEM011



The ARCOptix OEM011 is a flexible alternative to our OEM010 series. The main module features a built-in light source (SiC globar) regulated in temperature as well as our permanently aligned interferometer system. The TE-MCT detector has been moved to an external module which is ideal for configurations requiring a sampling system (short path gas cell, purged volume, etc.). Both modules are easily fixed on optical breadboards and can accommodate 30 mm cage system rods for rapid prototyping.



Optical routing in the ARCOPTIX OEM011

Features

- Internal light source
- Compact, rugged unit
- External detector module
- Robust to ambient light perturbation
- Dynamically adjustable resolution:
 - 16cm^{-1}
 - 8cm^{-1}
 - 4cm^{-1}
 - 2cm^{-1}
 - 0.5cm^{-1} (on request)
- Wear free moving parts for extended lifetime
- Compatible with 30 mm cage system rods
- Temperature controlled reference laser

Specifications

Product code	FTIR-OEM011-060-4TE	FTIR-OEM011-085-4TE	FTIR-OEM011-120-4TE	FTIR-OEM011-160-LN2
Beam-splitter material	CaF ₂		ZnSe	
Spectral Range [cm ⁻¹]	5'000-1'660	6'600-1'200	5'000-830	5'000-650
Spectral Range [μm]	2-6	1.5-8.5	2-12	2-16
Detector Type	MCT (4-TEC)			MCT (LN2)
Detector Peak D* [cm Hz ^{1/2} W ⁻¹]	>1x10 ¹¹	>8x10 ⁹	>4x10 ⁹	>5x10 ¹⁰
Signal-to-noise ratio	> 80'000:1 ⁱ	>40'000:1 ⁱ		>70'000:1 ⁱ
Output beam	Ø 12.7mm collimated (max ~30mrad half angle)			
Interferometer type	Permanently aligned, double retro-reflector design			
Resolution (unapodized) [cm ⁻¹]	0.5 ⁱⁱ , 2, 4, 8 (user selectable)			
Wavenumber repeatability	<10 PPM			
Scan frequency	>4 Hz @ 4cm ⁻¹			
Reference laser wavelength [nm]	850			
A/D Converter	24 bit			
Operating T [°C]	10 to 40			
Storage T [°C]	-20 to 60			
Built-in light source	SiC globar (1550°K)			
Power requirement	12V / 30W (interferometer), 12V / 10W (detector module)			
Communication Interface	USB 2.0 / Ethernet with embedded processing			
Software Interface	Windows 10/11, Linux API for controlling the instrument via our DLL Single board computer available on request			
Dimensions [mm]	165x145x82 (interferometer), 93x75x66 (detector module, without dewar)			
Weight [g]	2100 (interferometer), 400 (detector module, without dewar)			

ⁱ Input to output direct light routing, 60s measurement, around peak sensitivity wavelength, 4cm⁻¹, Norton-Beer weak apodization.

ⁱⁱ Available on request only, please contact us at info@arcoptix.com for details
SPECIFICATIONS ARE SUBJECT TO CHANGES WITHOUT NOTICE.