



IR Sphinx ATR product portfolio and technical specification

Spectrometer

IRSphinx
ATR Lab



IRSphinx
ATR Portable



IRSphinx
ATR Industrial



Article Number	919 101 -00	919 100 -00	919 201 -00	919 200 -00	917 101 -00	917 100 -00	917 201 -00	917 200 -00	918 101 -00	918 100 -00	918 201 -00	918 200 -00
Spectral range	2.5–5.0 μm 4000–2000 cm^{-1}		5.5–11.0 μm 1800–900 cm^{-1}		2.5–5.0 μm 4000–2000 cm^{-1}		5.5–11.0 μm 1800–900 cm^{-1}		2.5–5.0 μm 4000–2000 cm^{-1}		5.5–11.0 μm 1800–900 cm^{-1}	
ATR Crystal Material	ZnS	ZnSe	ZnS	ZnSe	ZnS	ZnSe	ZnS	ZnSe	ZnS	ZnSe	ZnS	ZnSe
ATR Frame Material	Stainless steel											
Spectrometer Housing Material	Anodized aluminium											
ATR Surface area	17 x 27 mm											
Number of Sample Reflections	9											
Illumination Source	Electrically modulated MEMS emitter											
Source Lifetime	~5000 Hrs of continuous measurement											
Dispersing Element	Linear variable filter (LVF)											
Detector	128-pixel uncooled pyroelectric array											
Pixel Size/Pitch	60 x 500 μm / 100 μm											
Pixel to pixel wavelength interval	43.3 nm											
Spectral Bandwidth (FWHM)	~2% of centre wavelength											
Analogue to Digital Converter	16-bit											
Signal	Detector voltage > 1V @ 8 Hz and 1600 cm^{-1}											
Measurement time (typical)	~30 seconds (N=200)											
Operating Environment	0–50° C non-condensing											
Storage environment	0–60° C non-condensing											
Dimensions (L x W x H)	165 x 74 x 35 mm											
Protection Class	IP64											
Battery	-				Lithium polymer (LiPo) 1300 mAh				-			
Power Requirement	5 Volt DC, 5 W				5 Volt DC, 5 W				5 Volt DC, 10 W			
Standalone Operation	-				-				yes			
Thermal Stablisation	-				-				yes			
Interface	USB, Ethernet				USB, Ethernet, Bluetooth				USB, Ethernet, CANopen			
Weight	~700 g				~710 g				~750 g			