IR Sphinx ATR product portfolio and technical specification

Spectrometer	IRSphinx ATR Lab				IRSphinx ATR Portable				IRSphinx ATR Industrial			
Article Number	919101-00	919100-00	919201-00	919200-00	917101-00	917100-00	917201-00	917200-00	918101-00	918100-00	918201-00	918200-00
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 Stabilisation	–				–				yes			
Interface	USB, Ethernet				USB, Ethernet, Bluetooth				USB, Ethernet, CANopen			
Weight	~700 g				~710 g				~750 g			

Comline Sensor Systems

Comline Elektronik Elektrotechnik GmbH
Karl-Rapp-Straße 1 • 92442 Wackersdorf • Germany
Fon +49 9431 / 7565-0 • Fax 7565-25
comline@comline-elektronik.de • www.comline-elektronik.de

Supported by:
Federal Ministry of Economics and Technology
on the basis of a decision by the German Bundestag