

IR Sphinx Transmission product portfolio and technical specification



**IRSphinx
Transmission Lab**



**IRSphinx
Transmission Industrial**

Spectrometer	IRSphinx Transmission Lab		IRSphinx Transmission Portable		IRSphinx Transmission Industrial	
Article Number	909 100-00	909 200-00	907 100-00	907 200-00	908 100-00	908 200-00
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}
Cuvette	Aluminium 909 01-00		Aluminium 909 01-00		Stainless steel + fluid channels 909 02-00	
Spectrometer Housing Material	Anodized aluminium					
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 + 2 custom bandpassfilters					
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 \gg 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)	85 x 99 x 97 mm		165 x 74 x 97 mm		85 x 99 x 97 mm	
Protection Class	IP44		IP64		IP44	
Battery	–		Lithium polymer (LiPo) 1300 mAh		–	
Power Requirement	12 Volt DC, 5 W		5 Volt DC, 5 W		12 Volt DC, 10 W	
Standalone operation	–		–		yes	
Thermal Stabilisation	–		–		yes	
Interface	USB, Ethernet		USB, Ethernet, Bluetooth		USB, Ethernet, CANopen	
Weight	~430 g		~720 g		~460 g	