

IR Sphinx Gas
product portfolio and
technical specification



IRSphinx
Gas Lab



IRSphinx
Gas Portable



IRSphinx
Gas Industrial

Article Number	909 110-00	909 210-00	907 110-00	907 210-00	908 110-00	908 210-00
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}
Path Length	12 cm					
Cell Material	Stainless steel					
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					
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 89 mm					
Fitting	Quick fit, 4 mm tubings					
Protection Class	IP64					
Battery	–	Lithium polymer (LiPo) 1300 mAh	–	–	–	–
Power Requirement	5 Volt DC, 5 W	5 Volt DC, 5 W	5 Volt DC, 5 W	5 Volt DC, 5 W	5 Volt DC, 10 W	5 Volt DC, 10 W
Standalone Operation	–	–	–	–	yes	yes
Thermal Stabilisation	–	–	–	–	yes	yes
Interface	USB, Ethernet	USB, Ethernet, Bluetooth	USB, Ethernet, Bluetooth	USB, Ethernet, Bluetooth	USB, Ethernet, CANopen	USB, Ethernet, CANopen
Weight	~700 g	~710 g	~710 g	~710 g	~750 g	~750 g