




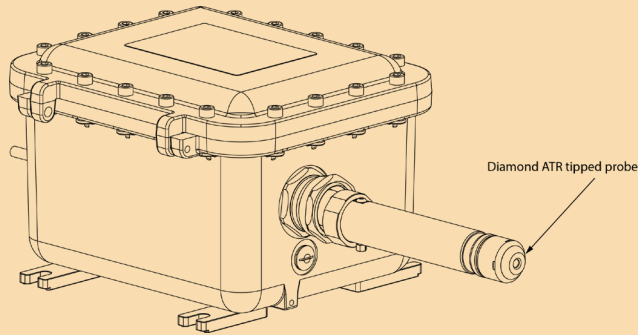
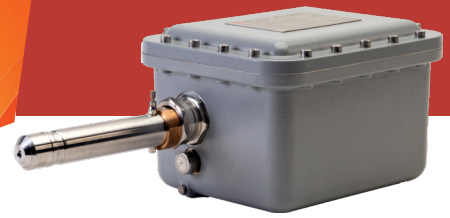
## Technical Specifications

Parameter	IRmadilloEx High Temperature
Model number(s)	ASM0627-09-E-Cx-O-Gx-D3x
Spectral range	Mid-infrared (648 to 1800 cm <sup>-1</sup> and 2700 to 3800 cm <sup>-1</sup> )
Sampling material environment	Liquids and slurries
Sample interface	ATR Insertion probe
Wetted materials	ATR: Diamond Probe: Hastelloy C276 Sealing O-rings: FFKM
Body casing material	Cast aluminium - epoxy painted
Process conditions	Temperature (analyte): -20°C to +220°C (-4°F to +428°F) Pressure (analyte): -0.999 to 41.37 barg (pressure rating may be affected by mechanical interface) pH range: 0 to 14
Operating environment	Temperature (ambient) Option 1: -10°C to +55°C (+14°F to +131°F) Temperature (ambient) Option 2: -20°C to +45°C (-4°F to +113°F) Humidity (ambient): 0 to 95% RH
Enclosure rating	IP65
Long-term stability	Fixed interior components ensure high stability and vibration tolerance.
Sensitivity	LoD 100 ppm (typical)
Minimum acquisition time	10 s
Dimensions	Body (H x W x D): 200 x 281 x 310 mm (approx. 8 x 11 x 12 in) Probe maximum insertable length (without flange): 195 mm (approx. 7.7 in) Probe maximum insertable length (with flange): 181 mm (approx. 7.1 in) Probe diameter: 38 mm (approx. 1.5 in)
Weight	Approx. 18.5 kg (41 lb)
Fibre-optic coupling to probe	None. Instrument's fixed probe is inserted directly into vessel or pipework.
Power & input requirements	Power: 100-240 Vac, 50/60 Hz, 110 W max Purge gas: Zero / instrument grade air or N <sub>2</sub> (minimum quality according to ISO8573-1:2010 of Class 1:2:1 or better)
Data output	OPC-UA (over Ethernet) Modbus TCP (over Ethernet) Modbus RTU (over RS-485) Export as text file Compatible with all major analysis packages Communications grade fibre-optic cable to external controller
Max length fibre-optic lead to controller	275 m (Type OM1, 62.5/125 µm) Optional OM1 extension
Hazardous environment certifications	 II 1/2 G Ex db IIB+H <sub>2</sub> T4 Ga/Gb IECEX CML 22.0082X CML 22ATEX1522X CML 22UKEX1523X
Patents	Keit's IRmadillo FTIR spectrometer is the subject of patents and patent applications, details of which may be found at: <a href="http://www.keit.co.uk/legal">www.keit.co.uk/legal</a>



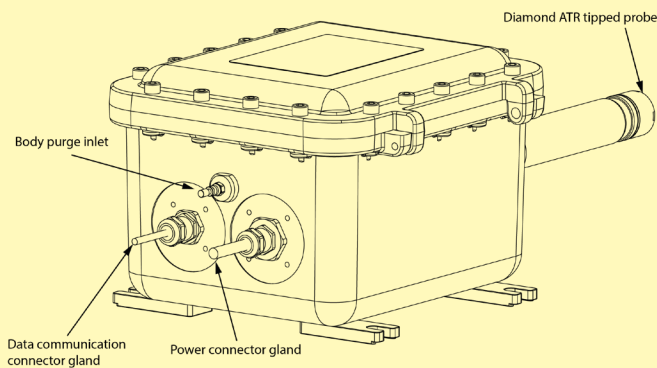
# IRmadilloEx<sup>TM</sup>

High Temperature  
Process Analyser



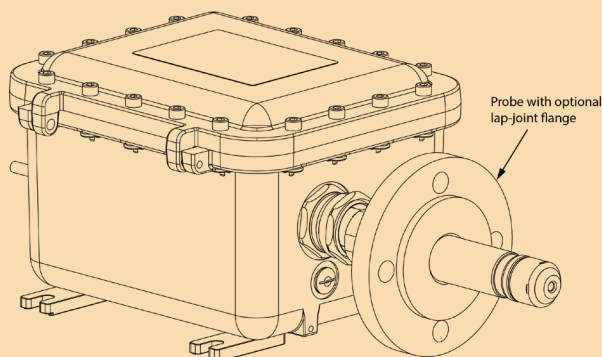
### Front view

Durable exterior casing with fixed insertion probe suited for real-time process analysis.



### Back view - connections

Power, data and purge connections visible. The highly vibration-tolerant design results in a uniquely tough, compact process analyser safe for use in hazardous environments.



### Optional flange

With suitable support, an optional flange allows the spectrometer to be bolted directly into pipework.