



# IRmadillo25NA™

## Ex Certified Process Analyser for North America



## Technical Specifications

Parameter	IRmadillo25NA FTIR Spectrometer
Spectral range	Mid-infrared (800-3800 cm <sup>-1</sup> /2.6-12.5 μm)
Sampling material environment	Liquids and slurries
Sample interface	ATR insertion probe
Wetted materials	ATR: Infrared transparent glass (chalcogenide) Probe: Hastelloy or stainless steel Sealing O-ring: FFKM
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
Signal-to-noise ratio (SNR)	Peak SNR 15500 (2 min sampling time)
Dimensions	Body (H x W x D): 200 x 281 x 310 mm (approx. 8 x 11 x 12 in) Probe (Diameter): 25 mm (approx. 1 in) Probe (Maximum insertable length): 179 mm (approx. 7 in)
Weight	Approx. 18.5 kg (40.8 lb)
Fibre-optic coupling	None. Instrument's fixed probe is inserted directly into vessel or pipework.
Input requirements	Purge gas: Zero / instrument grade air or N <sub>2</sub>
Data output	OPC-UA (Ethernet) Modbus RTU (RS-485, RS-232) Modbus TCP (Ethernet) Export as text file (eg, CSV, SPC) Compatible with all major analysis packages
Temperature (ambient)	-15°C to +40°C (5°F to 104°F)
Temperature (analyte)	0°C to +80°C (32°F to 176°F)
Humidity (ambient)	0 to 95% RH
pH range	0 to 9
Power requirements	100-240 Vac, 50/60 Hz, 100 W max
Pressure (analyte)	0 to 19 barg
Hazardous environment certification	Class 1, Zone 0/1 AEx db IIB+H <sub>2</sub> T4 Ga/Gb Class 1 Division 2, Group B SGSNA/19/CA/00001X
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>

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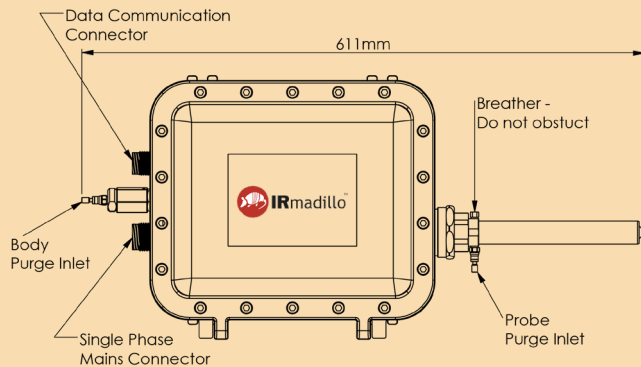
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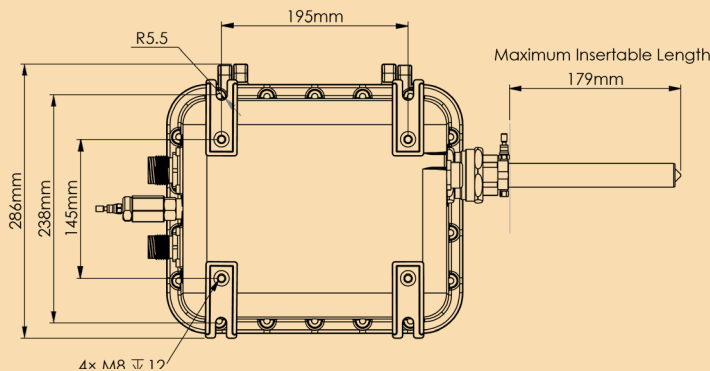
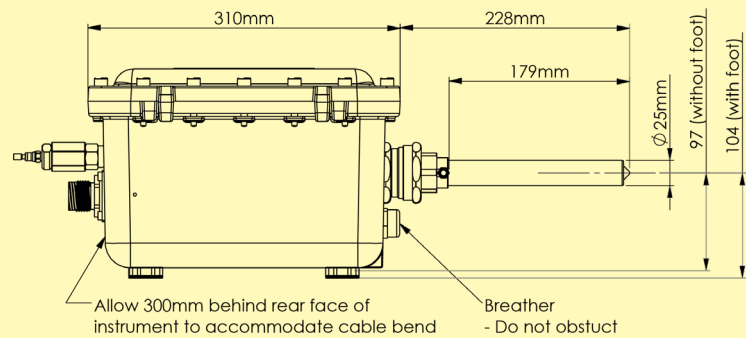


### Top view

The IRmadillo durable exterior casing with fixed insertion probe suited for real-time process analysis.

### Side view

Exterior dimensions. Highly vibration-tolerant design results in a uniquely tough, compact process analyser.



### Bottom view

Four mounting holes for securing the instrument directly onto supporting platforms in the production area.

### Optional flange

With suitable support, the optional flange on the probe allows bolting of the spectrometer directly into pipework.

