



# ACOUSTIC LEAK FLOW ANALYZER (ALFA UHT)

GOWell's **ALFA-UHT** is a memory tool designed to withstand the extreme environments of Ultra-High Temperatures (UHT), capable of operating at temperatures up to 572°F for various well diagnostic studies, including Well Integrity Evaluation, Production Performance and Reservoir Monitoring. This tool measures Acoustic Spectrums from 8 Hz to 60,000 Hz with very high-frequency resolution.



The tool consists of very sensitive **Spectral Noise, High-Resolution Temperature, and a Casing Collar Locator** sensor, contributing to the success rate in well diagnostics.

ALFA UHT acoustic sensors measure sound produced downhole by either gas or liquid flow. Measurements are taken over a wide frequency range enabling effective identification of leak detection as well as detection of various kinds of gas, water, or oil flow, including flow behind the pipe.

## FEATURES

- Ability to distinguish flow behind pipe from flow inside pipe
- Ability to detect flows through multiple tubular
- Combinability with other logging tools to provide a complete well evaluation in a single run
- Detect noise through multiple barriers
- Compact by combining multiple sensors into one tool

## APPLICATIONS

- Leak Detection (tubing/casing/packer leaks)
- Diagnosis of Sustained Casing Pressure
- Reservoir Characterization and Formation Evaluation
- Borehole and Reservoir Performance
- Location of open perforations

UHT



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## SPECIFICATIONS

ALFA UHT	
<b>GENERAL SPECS</b>	
Maximum Operating Pressure	15,000 PSI (100 MPa)
Maximum Operating Temperature	572°F (300°C)
Diameter	1.65 in (42mm)
Length	3.94 ft (1.20m)
Weight	17.64 lbs. (8kg)
<b>ACOUSTIC SENSOR</b>	
Dynamic Range	80db
Operating Frequency Range	0-60kHz
Number of Spectral Channels	1024
<b>TEMPERATURE SENSOR</b>	
Accuracy	0.1 °C
Resolution	0.001°C
Response Time	0.4 sec
<b>CCL SENSOR</b>	
Measurement Range	0 to 3.3V
Resolution	+ /- 2 uV
SNR (Signal to Noise Ratio)	14 dB
<b>MEMORY</b>	
Capacity	2 GB
<b>SPECIAL APPLICATIONS</b>	
Corrosion Resistance	NACE Compliant
Geothermal	Ultra-High Temperatures