OPENFIELD™
TECHNOLOGY
MICRO INSTRUMENTS FOR HARSH ENVIRONMENTS

½" PRESSURE AND TEMPERATURE MICRO-RECORDER

HIGH ACCURACY - HIGH RESOLUTION

PRODUCT LINE FEATURES

Developed to conquer technical challenges and fill an important Exploration & Production market gap, OpenField™ sensors are uniquely capable of deploying microchip technology in the harshest of environments. Pairing the benefits of mono-crystal micro sensing elements with a corrosion -and HPHT- resistant protective casing small enough to fit in the palm of your hand, OpenField™ sensors will enable your operators to collect vastly superior data readings on the pressure and temperature of all your downhole operations.

IDEALLY SUITED FOR PRESSURE TRANSIENT ANALYSIS

OpenField™ proprietary MEMS technology dramatically improves dynamic data acquisition and interpretation capacities during Well Test operations, thanks to its extremely fast settling time.

DUAL GAUGE DOWNHOLE FLOW MEASUREMENT

To maximize measurement performance with minimal restriction, two gauges serve as a Venturi flow-meter when mounted on a custom-built mandrel.

THE INNUMERABLE BENEFITS OF MINIATURIZED TECHNOLOGY

The small size of our revolutionary pressure and temperature gauges offers key advantages to well operators: easy deployment, immediate responses to the smallest change in condition, low power consumption...while assuring data quality superior to even Quartz technology.

SPECIFICATIONS

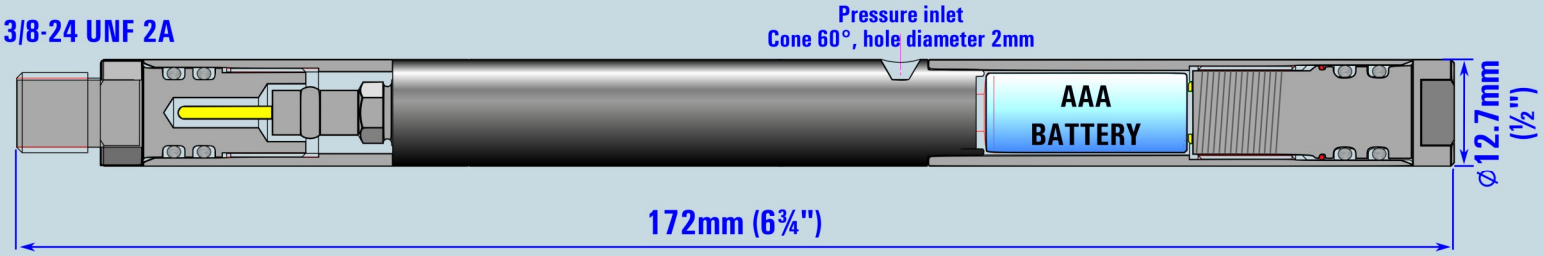
Outside Diameter	12.7mm (½'')
Length	172mm (6¾")
Material	Inconel 718 - Sour Service
Battery	1 single sub-AAA lithium battery
Memory	5.6 million data sets (Time, Pressure, Temperature)
Pressure Range	10 or 15 kPsi (700 or 1000 bar)
Temperature Range	125 or 150 °C (257 or 302 °F)
Pressure Accuracy	±0.01% FS
Pressure Resolution	0.00005% FS at 1Hz
Temperature Resolution	1mK at 1Hz
Sampling Rate	32 milliseconds to 128 seconds
Deployment	DST Mandrel Carriers Slickline Coiled tubing Surface ESP/Jet Pump
Interface	Plug and Play USB

APPLICATIONS

– Fracturing Jobs
– Build-up Analysis
– Perforation Jobs
– Well Monitoring
– Flow Assurance
– Gradient Logging
– Reservoir Evaluation
– Water Injection Monitoring

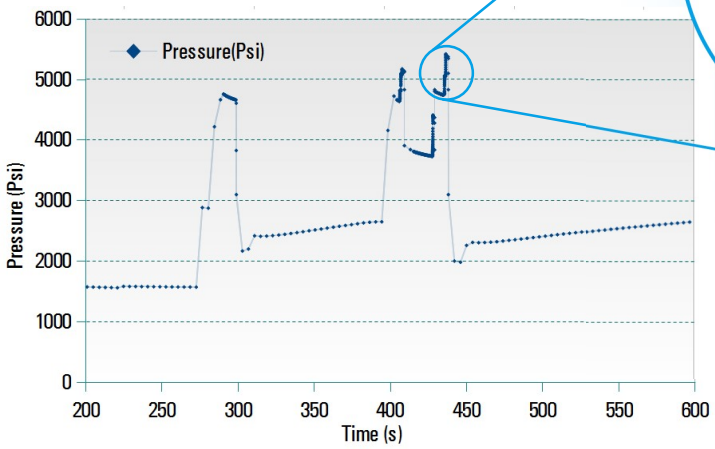
HIGH ACCURACY - HIGH RESOLUTION

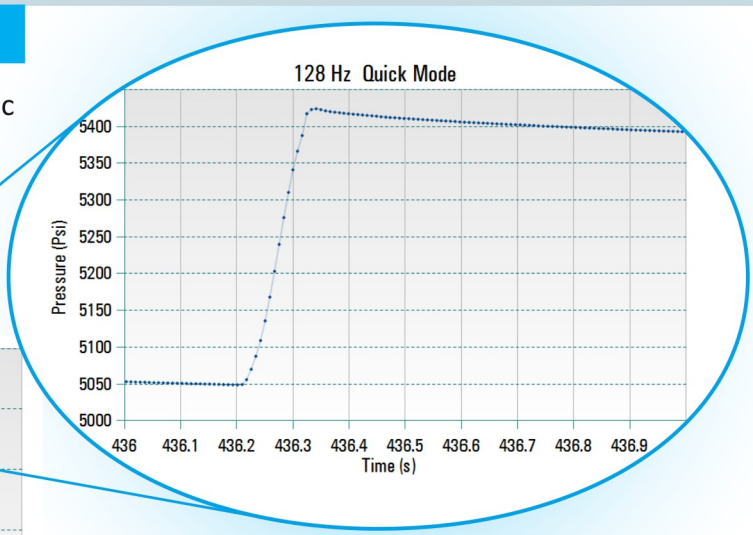
MEMS MICRO-RECORDER FOR PRESSURE AND TEMPERATURE



RECORDING MODES

Fast events monitoring is made easy with automatic transitions between high datarate modes and slower modes according to user-defined criteria. Quick mode measurement frequency is anything from 128Hz (one reading every 8ms), while less than 1 reading per second is considered slow.

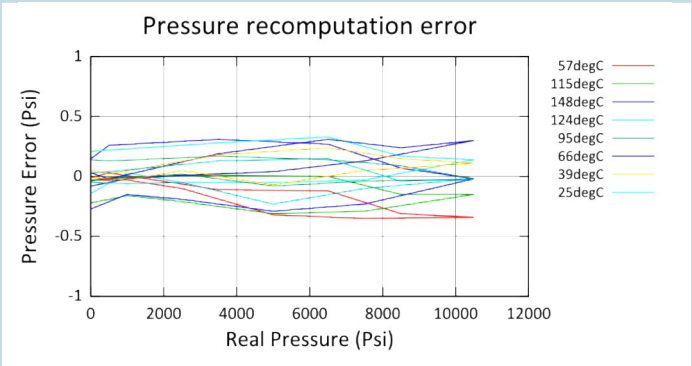


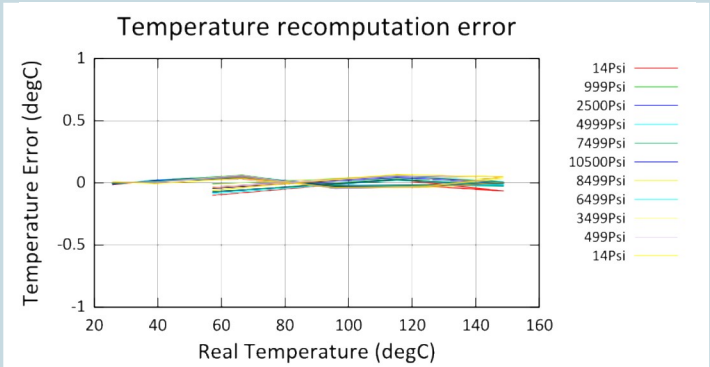


Data from a frac job with build-ups. 128Hz threshold set at 3000 Psi.

The transition back to 'slow mode' is triggered
according to user-defined criterion :
- Low pressure variation rate
- Absolute pressure threshold
- Fixed elapsed time

METROLOGY





High Accuracy, **High Resolution** measurements with fast settling times mean the collection of **outstanding derivative analysis** data. Any Pressure Transient Analysis will directly benefit from the increased data quality afforded, giving you an even deeper and more detailed understanding of your reservoir.

www.openfield-technology.com
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