

Reservoir Group's Sentinel gauge is an extremely rugged downhole pressure and temperature gauge designed to be run as part of any wireline string.

A true user-friendly 'Run-it-yourself' gauge contained in a bespoke spring mounted shock absorbing assembly, the Sentinel is fully automatic and requires no operator input to acquire data.

The Sentinel is supplied in monitor mode, a non-recording mode, where it is checking pressure and temperature readings every two minutes. When a user-programmed temperature or pressure threshold has been exceeded, the Sentinel automatically enters record mode and stores data to memory at a pre-set sample rate. At the end of a survey, the Sentinel stops recording automatically when pressure and temperature readings fall below the user-programmed threshold values. The Sentinel then reverts to monitor mode ready for the next survey.

A large 1,000,000 data set memory and a built in real-time-clock allows real-time storage of data, in individual survey data files, so that every survey is easy to identify. Multiple wireline surveys/drift runs are possible on a single long life AA size battery. A gradient/BHP survey can be performed during any drift run with no additional rig time or wireline operations.



Features	Benefits
Fully automatic	No operator input required to record data
All data stored with real-time values	Enables quick and easy analysis
Large data set memory (1,000,000)	Provides long duration recording at fast sample rates
Innovative electronics	Dramatically reduces power consumption
No dangerous goods paperwork required	Easy shipping

Sentinel for Demanding Applications

- Pressure build-up or draw-down tests
- Production surveys
- Gradient surveys
- Perforation monitoring

- Reservoir evaluation, well testing and DST
- Static, flowing and build-up surveys
- Stimulation monitoring

Technical Specifications

Pressure	
Maximum external pressure	Must not exceed sensor range or 15 ksi max
Sensor range	2 options, 8.6 ksi and 15 ksi
Sensor type	Piezo-resistive
Accuracy	<±0.06% FSO
Accuracy typical	±0.04% FSO
Resolution	0.2 psi
Temperature	
Maximum temperature	Must not exceed 150°C
Operating range	0° to 150°C
Accuracy	±1.0°C
Accuracy typical	±0.5°C
Resolution	0.05°C
Power	
Battery type	AA type lithium, hardwired
Operating voltage	3.6 to 3.9 V
Battery Life*	Up to 1 year
Memory	
Sampling interval	1 to 600 seconds
Memory type	Non-volatile
Capacity	1,000,000 datasets
Record contents	Real time, pressure, temperature
Other	
Connections	1 1/16" sucker rod
Materials	SS 17-4 PH, Gauge Sub K500 Monel
Service	Standard and H ₂ S

*Battery life varies with temperature and sampling interval

1.875" OD (Shock Housing & Gauge Assembly)

