



ELECTRONIC MEMORY RECORDERS

Gas Lift Side Pocket Mandrel Gauge

Spartek Systems specializes in providing the oil and gas industry with high quality data to monitor well performance and diagnose potential problems. Founded in 1994, Spartek Systems leads the industry in providing cost effective solutions for acquiring reliable well information.



Product Overview

Spartek introduced the first 1" Side Pocket Mandrel (SPM) gauge to the oil and gas industry in 1998. The external configuration resembles that of a conventional side pocket gas lift valve. The gauge uses the same sealing surfaces and latches as the standard gas lift valve. The gauge can also be set and recovered using standard tooling. The obvious advantage of the side pocket arrangement is the pressure gauge in the pocket provides a non-intrusive environment, enabling well fluids or gas to flow unimpeded.

The SPM gauge has been designed to withstand hazardous environments, particularly during setting and recovery. The pressure gauge is constructed from either 17-4 or Inconel 718 which is heat treated to provide a very rigid mechanical assembly, in order to withstand over 15,000 psi pressure. This material is also resistant to well stimulation fluids, which can often be highly corrosive.

The electronics and mounting arrangement has been designed specifically for this rugged application. The gauge utilizes the same proprietary technology as our Sapphire family of pressure gauges providing performance unmatched in the industry

Primary Features

- ▶ Superior data quality / stability
- ▶ Low power consumption
- ▶ Large memory capacity
- ▶ Pressure trigger
- ▶ Compatible with Windows 7/Vista/XP/2000

Applications

- ▶ Long term monitoring of flowing wells with no tubing restrictions
- ▶ Frac monitoring
- ▶ Production testing
- ▶ Monitor well stimulation
- ▶ Monitor perforations through tubing
- ▶ Monitor pressure behind water injection valve
- ▶ Simultaneously monitors tubing and carry pressure

SPARTEK SYSTEMS

Providing Our Customers With "Best In Class" Technology

Email: sales@sparteksystems.com

<http://www.sparteksystems.com>

Specifications:

Model	SS2800	SS2801	SS2810
Application	Side Pocket Mandrel Top Latch	Side Pocket Mandrel Bottom Latch	Side Pocket Mandrel Top Latch
Pressure Sensor Type Range(s) (psi) Accuracy ^{1,2} Resolution Drift	Sapphire 750, 1500, 3k, 6k, 10k, 15k or 20k 0.3 psi or 0.024% FS 0.0003% FS < 0.024% FS / year	Sapphire 750, 1500, 3k, 6k, 10k, 15k or 20k 0.3 psi or 0.024% FS 0.0003% FS < 0.024% FS / year	Sapphire 750, 1500, 3k, 6k, 10k, 15k or 20k 0.3 psi or 0.024% FS 0.0003% FS < 0.024% FS / year
Temperature ³	170°C or 338°F	170°C or 338°F	170°C or 338°F
Power Requirements Voltage (min) Current (sleep) Current (sample)	3 V 0.20 mA 4.80 mA	3 V 0.20 mA 4.80 mA	3 V 0.20 mA 4.80 mA
Date Acquisition Channels Fastest sample rate Memory Capacity Options Pressure Trigger	Pressure Temperature Time 1 sec/sample 1,000,000 samples 2,000,000 samples Yes	Pressure Temperature Time 1 sec/sample 1,000,000 samples 2,000,000 samples Yes	Pressure Temperature Time 1 sec/sample 1,000,000 samples 2,000,000 samples Yes
Housing Material Diameter Length	17-4 PH / Inconel 718-NACE 1.0 inch [25.4 mm] 12 inch [304.8 mm]	17-4 PH / Inconel 718-NACE 1.0 inch [25.4 mm] 12 inch [304.8 mm]	17-4 PH / Inconel 718-NACE 1.5 inch [38.1 mm] 14 inch [355.6 mm]
Communications	RS232 Port or USB	RS232 Port or USB	RS232 Port or USB
Software OS	Windows 7/Vista/XP/NT/2000	Windows 7/Vista/XP/NT/2000	Windows 7/Vista/XP/NT/2000
Surface Readout	No	No	No

Notes:

- Accuracy is larger of the two stated values. This includes the combined effects of hysteresis, repeatability, and the corrected linearity over the calibrated temperature range.
- Pressure accuracy for the lower pressure transducers are based on the following calibrated temperature ranges: 750 psi (0 to 80°C), 1500 psi (0 to 100°C), and 3000 psi (0 to 120°C). All other transducers are based on maximum operating temperature specified. Consult your Spartek representative for specifications at other calibrated temperature ranges.
- Operating Temperature Range for the equipment is stated from 0°C to max temperature. Actual calibrated temperature range can vary based on customer requirements

Specifications subject to change without notice

For More Information, Pricing, and Technical Support Contact:



#1 Thevenaz Industrial Trail
Sylvan Lake, Alberta
Canada, T4S 2J6

Tel: (403) 887-2443
Fax: (403) 887-4050

Providing Our Customers With "Best In Class" Technology