



ELECTRONIC MEMORY RECORDERS

Wellhead Data Recorder

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

The SS6100 Wellhead Data Recorders (WHDR) provide a cost-effective solution for monitoring well pressure and temperature. The system can be configured to measure up to three independent pressure or temperature sensors. Each “smart stem” is independently calibrated and interchangeable from the main body. Both Quartz and Sapphire pressure sensors are available, allowing users to reconfigure the system as needed or utilize backup “smart stems” when recalibration is required.

The system is powered by a single D-size cell, with support for both primary lithium (intrinsically safe) and alkaline battery types. A built-in battery “gas gauge” provides real-time monitoring of remaining battery life. The large memory capacity allows storage of up to 16 million samples, including time, pressure, and temperature.

Bluetooth Low Energy (BLE) enables wireless connectivity and seamless pairing with mobile devices (iOS/Android), the latest release of SparGauge, and the SS6627 Surface Acquisition Unit (SAU), which can also collect data from permanent downhole sensors.



Primary Features

- ▶ Compact, rugged, intrinsically safe design for field deployment, Ex ia IIB T3 Ga
- ▶ Supports up to 3 configurable sensor inputs
- ▶ Exceptional data quality / stability over wide operating temperature range
- ▶ Available in a several pressure ranges to optimize results (750 psi to 10,000 psi)
- ▶ User programmable sample rates (1 Sa/sec max)
- ▶ 16 million data points memory with high speed USB download.
- ▶ Powered by single D-size lithium primary cell (17Ah)
- ▶ Low power consumption
- ▶ High Contrast OLED character display with magnetic switch activation.
- ▶ Field maintainable
- ▶ Compatible with iOS, Android, and Windows 10 and 11

SPARTEK SYSTEMS

Providing Our Customers With “Best In Class” Technology

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Specifications:

MODEL SS6100			
Input channels	1-3 Channels (see Sensor Types)	Operating Range	-40°C to 70°C (-40°F to 158°F)
Pressure Sensor Sensor type Available ranges Accuracy ^{1,2} Resolution Sensor type Available ranges Accuracy Resolution Stem Housing	Sapphire (piezo-resistive) 750, 1500, 3k, 6k, or 10k (psi) 0.3 psi or 0.03% Full Scale 0.0003% Full Scale Quartz 5k, or 10k (psi) 0.020% Full Scale 0.0002% Full Scale 17-4 PH Stainless or Inconel-718	Temperature Sensor Sensor Type Probe Housing Probe Sheath Remote Distance Range Accuracy Resolution	Remote fast response RTD 17-4 PH Stainless 316 Stainless Standard 10m (optional up to 30m) 177°C (350°F) +/- 0.4°C (0.7°F) 0.005°C (0.009°F)
Calibration	< 3 psi drift per year (Recommend re-calibration every 9 -12 months)	Data Acquisition Total Sample Capacity Maximum Sample Rate Programmable Sample Modes	16,000,000 samples 1 sample/second Up to 15 different intervals
Power	Primary Lithium Battery (I.S.) Operating -40°C to 70°C Rechargeable [Non I.S.] (Operating -20°C to 60°C) Alkaline D Cell (for limited use; performance may vary)	Safety	Certified Intrinsically Safe Ex ia IIB T3 Ga (with I.S. Battery)
Software OS	Windows 10 and 11	Communications	Full speed USB 2.0 Bluetooth LE

Notes:

1. Accuracy is larger of the two stated values over the temperature range of -15 °C to 70 °C. This includes the combined effects of hysteresis, repeatability, and the corrected linearity over the calibrated temperature range. At temperatures below -15 °C, the actual error may be as high as 0.05% of Full Scale. Typically, the accuracy will be within the stated specifications.
2. Accuracy can be improved by limiting the range of the calibration (pressure and/or temperature). Consult your Spartek representative for specifications at other calibrated pressure and temperature ranges.

Specifications subject to change without notice

For More Information, Pricing, and Technical Support Contact:



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