Pioneer Petrotech Services Inc.

Proudly Canadian






# PPS27XM

## 300 °C Permanent Monitoring System

www.pioneerps.com

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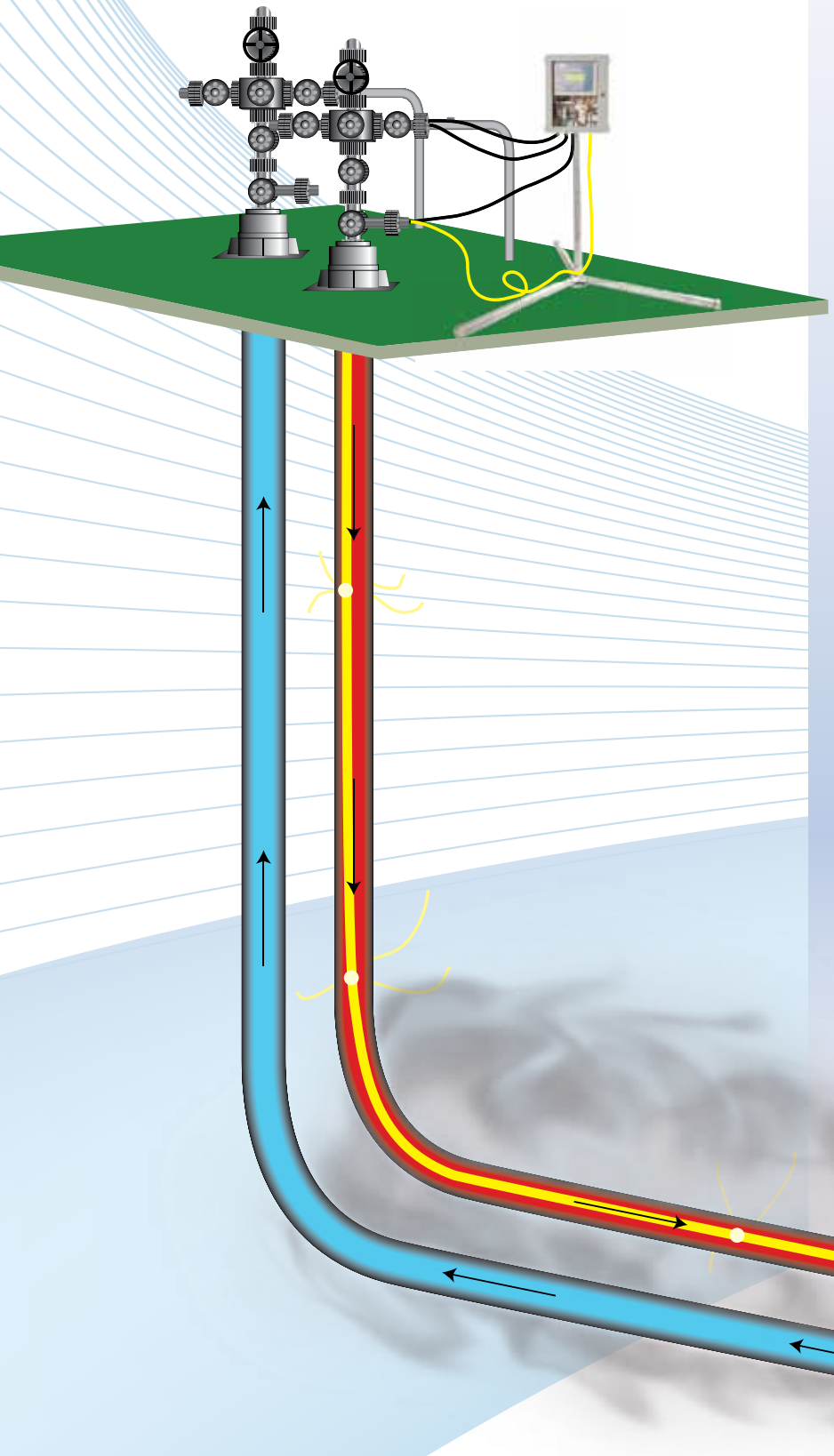


PPS27XM is a permanent monitoring system that measures temperature and pressure at extreme high temperature such as those experienced in thermal oil recovery, like Steam Assisted Gravity Drainage (SAGD) and Cyclic Steam Stimulation (CSS) as well as other geothermal applications.

During thermal operations real-time monitoring can provide clearer understanding of steam chamber development, identify thief zones and provide operators with data that helps maintain the injection and production wells at approximately reservoir pressure to increase stability.

The main components of the PPS27XM are a pressure sensor, thermocouple sensor(s), pressure chamber and surface unit. The system is very versatile and with no electronics downhole it is very robust and doesn't experience electromagnetic interference.

## Main Applications:

- SAGD
- CSS
- Geothermal
- Steam Injection

# PPS27XM 300 ºC Permanent Monitoring System

## System benefits:

- Versatility
- No Electronics Downhole
- Electromagnetic Interference Immunity
- Cost-Effectiveness
- Customizable
- Reliability

## Specifications

### Thermocouple Sensor(s)

| | |
|---|---|
| Temperature Range | 0 to 300 °C (572 °F) or higher |
| Accuracy | ±2.2 °C or 0.75% of FS |
| Material | SS316L |

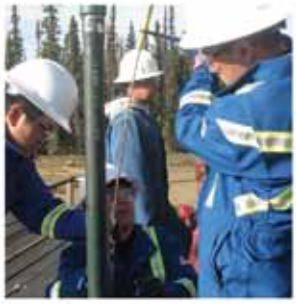
### Pressure Sensor

| | |
|---|---|
| Sensor Type | Capillary pressure sensor |
| Pressure Range | 0 to 3 kpsi (up to 10kpsi if required) |
| Pressure Accuracy | <±1% (FS) |
| Pressure Chamber | Configurable to customer requirements |

### Surface Unit

| | |
|---|---|
| Operating Temperature Range | -40 °C to 65 °C |
| Power Supply | 100-240VAC or 24VDC |
| Enclosure | NEMA4 |
| Sampling Rate | 1s to 1hr/sample |
| On-Board Flash Memory Capacity | 8,000,000 max |
| Data Transfer | Modbus/RTU |

# Smart Gauges and Simple Software



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