

# PPS25™ SILICON SAPPHIRE MEMORY GAUGE

## DESCRIPTION

Since 1999 the PPS 25 gauge is at once both the catalyst and cornerstone of PPS's downhole tools. It is the technological predecessor to all of PPS's tool developments and also remains one of its best sellers.

This gauge series consists of a high-sensitivity piezo-resistive silicon-sapphire chip used for pressure sensing. The chip is protected against ambient influences by a stainless steel diaphragm-sealed housing. The housing is filled with silicone oil for the transfer of the pressure from the diaphragm to the sensing component. The pressure sensing element is connected to a state-of-the-art high temperature electronic board (PCB) where the analog signal is processed for storage on the memory chips (Flash memory).

## PRODUCT SPECIFICATION

<b>Sensor Type</b>	<b>Silicon Sapphire</b>
<b>Service</b>	<b>H<sub>2</sub>S Services</b>

### Metrology–Pressure

Drift–psi/yr.	<3
Accuracy–psi full scale	± 0.03%
Resolution–psi	0.0003%
Range–psi	Up to 20 kpsi

### Metrology–Temperature

Rating–°C	125 (257 °F), 150 (302 °F), 177 (351 °F)
Accuracy–°C	± 0.5
Resolution–°C	0.01

### Characteristics

Power Source	One AA or C lithium pack
Communication	USB/RS232
Data Set	Time/Pressure/Temperature
Max Outside Diameter–inches	0.75 (19-mm)/ 1.0 (25-mm)/1.25 (32-mm)
Overall Length–inches	9 (229-mm)/11 (279-mm)
Housing Material	Inconel 718/Stainless Steel 17-4
Sampling Rate	1 sec. to 18 hours per sample
Memory Capacity	2,000,000 data sets standard

