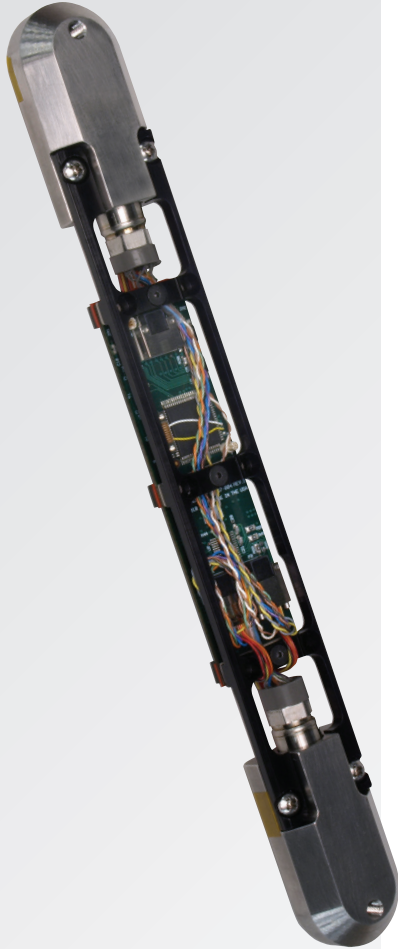


WPR™ Pressure While Drilling Sensor

SureLog-WPR-PWD



APS's SureLog™ Pressure While Drilling (PWD) sensor for WPR™ measures annular and drill pipe pressures in 4.75, 6.75 and 8.0 in. (121, 172 and 204 mm) WPRs. Captured data may be transmitted in real time via APS's SureShot™ MWD/LWD system, or stored in downhole memory for later download and analysis. Real-time data or pressure alarms may be transmitted via SureShot MWD.

Applications include:

Managing Downhole Pressures

Measurement and real-time monitoring of hydrostatic and dynamic circulating fluid pressures for balanced, managed pressure drilling (MPD), and underbalanced drilling (UBD).

Maintaining Formation and Borehole Integrity

Real-time annular and bore pressure measurements help assess the optimum pressures required within narrow fracture and pore pressure windows.

Managing Hydraulics Programs

Real-time determination of equivalent circulating density (ECD) for hole cleaning, swab and surge pressures for borehole stability, and BHA pressure loss.

Supporting Early Detection Programs

Timely annular, bore, and differential pressure readings facilitate early detection of fluid influx and lost circulation.

Product Preliminary Specifications

	Measurement	
	Range	Accuracy
Annular Pressure	0 - 20 kpsi (137.9 MPa)	±0.1% of FSR
Drill Pipe Pressure	0 - 20 kpsi (137.9 MPa)	±0.1% of FSR
Resolution	1.0 psi (6,895 Pa)	
Local Temperature Compensation	Yes	
Data Sampling Rate	5 seconds total (annular + drill pipe)	
Data Storage	Raw and compensated data are time-stamped and stored in SureShot memory.	
Environmental		
Operating Temperature	-13° to 347°F (-25° to 175°C)	
Maximum Pressure	20 kpsi (137.9 MPa)	