



Product Sheet:

Guardian Pressure During Drilling Sensor

System Features & Benefits

- Measures annular and internal hydrostatic pressure at the MWD tool using high accuracy piezoresistivity transducer. Available as a simple expansion option to the standard Orienteer MWD product range.
- Data transmitted to MWD Engineer's PC and Driller's Rig Floor Display for real time decision making and stored in on board memory in higher resolution for post run analysis.
- Fully compatible with the Orienteer surface detection and decoding system.
- Real time indication of annular pressure and ECD build up caused by cuttings loading, hole collapse, mud rheology and rotary speed.
- Indicates conditions that can potentially damage sensitive reservoirs and reduce production.
- Real time indication of downhole oil and gas influx enables early kick detection and prevents potential blow outs.
- Real time indication of shallow gas or water influx. Especially useful for riserless drilling

Guardian PDD Specifications**				
Parameters	Annular Pressure, Internal Pressure, Temperature			
Pressure Range	15,000 psi (20,000 psi on special request)			
Operating Temperature	-25 to 150°C operating (175°C survival)			
Accuracy	+/- 0.25% Full scale			
Resolution	0.25 psi			
Data Recording	Real-Time and downhole memory			
Memory Capacity	250hrs (minimum)			
Power Requirement	Powered by Orienteer Toolstring			
Sizes O.D.	4-3/4"	6-3/4"	8.0"	9-1/2"
Tool Joints	3-1/2" IF	4-1/2" IF	6-5/8" Reg	7-5/8" Reg
Bending Limits	(as per standard Orienteer MWD toolstrings)			
Max Flow Rate (USGPM)	450	900	1000	1200
Pressure Drop Water (psi)	<60	<55	<45	<30

Note: **Due to continuous product improvement these specification are subject to change without prior notice

