

HDD™ Vertical PLT String

Gamma ray (GR): tool measures the naturally occurring radiation that is emitted by various formations to determine lithology. Ideal for depth correlation, radioactive scale determination & tracer measurements.

Quartz Pressure (QPS): used to provide a continuous log of borehole fluid pressure and to record reservoir pressure draw-down and build-up data during flowing tests. Used for pressure gradient, drawdown, buildup pressure transient analysis.

Collar Locator (CCL): identifies pipe collars in the wellbore & end of tubing.

High Definition Holdup: emits & measures low energy gamma rays as a full-bore measurement of gas to liquid volume fraction, independent of flow regime or well deviation. Ideal for 2 phase flow profiling, gas diction & bubble point determination.

Fluid Density: measures the electron density (mass) of fluids in the wellbore, using low energy gamma rays to determine the downhole fluid density. This tool is ideal for multi-phase flow profiling (water, oil & gas).

Temperature: measurements from the low mass probe result in high resolution data with fast temperature response. The tool measures the borehole fluid temperature, which can be used for finding fluid entry, gas leaks and injection zones. It is also useful in finding cement tops.

Fluid Capacitance or Capacitance Water Hold-up (CWH): measures the dielectric constant of the surrounding borehole fluid to determine the water holdup. Ideal for 2 phase flow profile (water & oil).

Flowmeter: the Flowmeter/Spinner is run at the bottom of a PL tool string to monitor downhole fluid flow rates. As flow rotates the spinner blades, pulses are generated & are processed into rotations & fluid velocity. Ideal for flow & injection profiling on all well completions.

Outside Diameter: 1-3/8" (37.9mm) or 1-11/16" (42.86 mm)

Length: 18.5 ft. (5.64 m)

Weight: 85 lbs (38.55 kg)

Temperature Rating: 350f - (177c)

Pressure Rating: 15,000 psi - (103421 kpa)

