MINI
PLT

Mini Production Logging Tool

The Protherma™ PTS is a production logging tool that provides pressure, temperature, flowrate, gamma ray andd casing collar measurements on either Memory or Surfacee Readout mode for ultra-high-temperature environments



The Protherma tool is designed specifically for operation in geothermal and other high-temperature wells. The tool contains essential production logging sensors for pressure, temperature and flow rate measurements, as well as natural gamma ray for correlating geological features and a casing collar locator (CCL). The tool can be operated on slickline with the addition of the memory module, or in surface readout (SRO) mode on e-line.

Pressure measurements are made using a quartz pressure sensor, and a fast-response resistance temperature detector (RTD) is exposed to the well bore to accurately detect temperature variations. Flow rate is measured using interchangeable flow meters and impellers.

The tool can operate for up to 6 hours at 300°C in real-time mode, and up to 4 hours at 350°C in memory mode. All material used within the downhole suite meet NACE MRO175 specifications for corrosive well bore environments.

SPECIFICATIONS	
Temperature Rating*	177°C / 350°F
Pressure Rating	1,250bar / 18,000psi
Diameter	43mm / 1-11/16”
Weight	29.5kg / 65 lbs
Length	2743mm / 9’ (memory) 2235mm / 7.3’ (SRO)
Effective Range	0 to 45% Hold up (water)
Pressure resolution	0.00006% FS
Temperature Resolution	0.002% FS
Pressure Accuracy (+/-)	0.2% FS
Temperature Response time	~1.5 sec.
Temperature Accuracy	0.15% FS
Materials	Corrosion Resistant througout