

LOGIQ® InSite® Directional Tool (IDT-I)

The Halliburton InSite® Directional Tool (IDT-I) technology is a standalone LOGIQ® navigation package to be used with a LOGIQ tool string to provide navigation and borehole orientation information as required. The tool uses LOGIQ telemetry and data format for data acquisition and transmission to the surface system. The IDT-I tool can only be run with the LOGIQ surface system.

The IDT-I technology provides accurate information to determine borehole inclination and azimuth. When this information is combined with relative dip and dip azimuth measured by other tools, like dipmeters or multicomponent induction tools, true dip and dip azimuth of the dipping formations can be obtained.

The tool uses high-accuracy three-axis accelerometers and magnetometers to measure the gravitational force and magnetic field acting on each orthogonally arranged axis from which the navigation and borehole orientation information are derived.

Specifications	
Max Temp	350°F (175°C)
Max OD	3.63 in. (9.21 cm)
Length	7.6 ft (2.3 m)
Max Press	20,000 psi (137 895 Kpa)
Min Hole	4.5 in. (11.4 cm)
Max Hole	n/a
Weight	164 lb (74 kg)

Measurements				
Principle	High sample-rate accelerometer and magnetometer			
Measured Data	AccZ, AccX, AccY and MagZ, MagX, MagY			
Processed Data	HAZI Hole Azimuth	DEZ Inclination	RB Relative Bearing	AZI Tool Ref. to North
Range	0° to 360°	0° to 90°	0° to 360°	0° to 360°
Resolution*	±1.25°	±0.025°	±0.05°	±0.05°
Repeatability*	±0.05°	±0.1°	±0.1°	±0.1°
Calibration*	Orientation Test Stand			
Measured Point	66 in. from bottom of tool			

*Tool inclination at least 20°

