

PRODUCT SPEC SHEET

# ALL-ATTITUDE DROP KEEPER (AdK)

Scientific Drilling's All-Attitude Drop Keeper (AdK) is the most robust north-seeking drop gyro survey system in the industry.

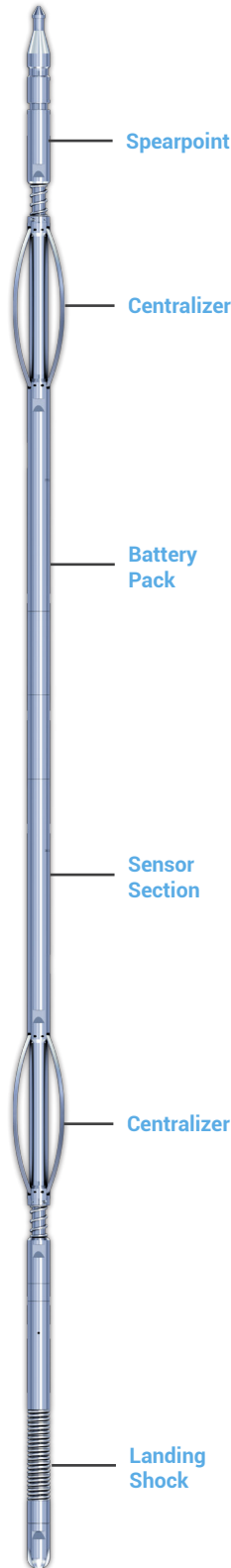
It combines the convenience of a drop memory tool with the accuracy and reliability of wireline tools to deliver a cost effective a survey solution.

## OPERATIONAL FLEXIBILITY

Unlike conventional drop systems, the revolutionary AdK operates in multiple modes and eliminates gyro compass errors at high inclinations. AdK's onboard "intelligence" switches modes at high angles to the faster, more accurate continuous survey mode and allows high speed surveying up to 100°. At low inclination, the AdK switches to the gyro compass mode, allowing true North referenced surveys.

## DELIVERING THE ULTIMATE VALUE

- High speed data collection of up to 7 surveys per second
- Automatic drift rate correction when tool is stationary
- Fluid Filled gyros delivering enhanced vibration tolerance
- Extended life batteries enabling up to 30 hours of continuous surveying
- Pump down capabilities allowing high accuracy surveying in extended reach sections
- Fully compatible with CCL and gamma for optimal depth correlation
- Innovative retrievable design ensuring recovery in case of operational emergency



TECHNICAL SPECIFICATIONS				
System Accuracy	Subject to well profile			
Pressure Rating	20,000 psi (137,900 kPa)			
Survey Speed	Maximum 400 ft/min			
Diameter	1.75 in (4.45 cm)	1.85 in (4.70 cm)	2.13 in (5.40 cm)	3.00 in (7.62 cm)
Length	18 ft (5.5 m)	19 ft (5.8 m)	19 ft (5.8 m)	28 ft (8.5 m)
Weight	110 lbs (50 kg)	120 lbs (54 kg)	140 lbs (63 kg)	500 lbs (227 kg)
Temperature Rating	300°F (149°C)	400°F (204°C)	400°F (204°C)	400°F (204°C)
Battery Power	Alkaline = 12 hours Lithium = 30 hours			
Maximum Inclination	100°	100°	100°	70°

\*\* SPE WPTS compliant error ellipse calculations available upon request for individual well profiles.

INSTRUMENT ACCURACY	
Inclination	± 0.1° (all angles)
Azimuth	± 0.1° (> 3° inclination)
Tool Face	± 0.1° (> 3° inclination)

## TARGET APPLICATIONS

- Survey Validation
- Reduced Error Ellipse
- Gross Error Detection
- Existing Wellbore Surveying
- Horizontal/Directional
- Extended Reach Wells
- River Crossings
- Continuous Surveying