

DrillView®

High-Resolution Drilling Dynamics

Industry leading LWD measurement performance when you need data on forces at bit, broadband 4-axis acceleration and downhole pressures.

Highlights

Leverage best-in-class resolution, accuracy and sample rates with this proprietary tool robust enough for the most demanding applications. DrillView's high-performance design aggregates wideband four-axis acceleration, tool face, RPM, forces at bit (WOB, TOB, BOB) and pressures in borehole annulus and the mud flow channel.

Deploy multiple tools to collect and verify calibrated along-string measurements and monitor conditions at numerous points in the drill string.

Service agnostic, the tool can be deployed on any BHA. Built-in field-replaceable batteries, deep memory storage, and speedy data readout enable long recording times and simplified service delivery.

Explore the logs using PetroMar's DeepView® DLIS viewer, optimized to navigate extreme sized and detailed datasets.

Applications

- Single-point/multi-point assessment and optimization
- Platform for Mechanical Specific Energy (MSE), rock properties, geo-mechanic analytics
- Analysis of high frequency torsional vibrations
- Drilling dysfunction analysis and mitigation
- Evaluation of new tools or BHA configurations
- Optimization of BHA design and drilling methods
- Bit vibration and condition-based maintenance



Deliverables

- Weight on Bit (WOB)
- Torque on Bit (TOB)
- Bending on Bit (BOB) moment and azimuth
- Wideband acceleration (3-axis and torsional)
- Continuous inclination and azimuth
- Acceleration statistics and spectral distribution
- BHA Motion Trajectory, stick-slip, and whirl
- Temperature

Complementary Companion Services

- **FracView®**
LWD Borehole Imager and Caliper
- **SpectraView®**
LWD Spectral and Azimuthal Gamma Ray Tool
- **DeepView®**
Extreme size DLIS Log Viewer
- **Interpretation Services**

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Measurement and Performance Specifications

PARAMETER	SPECIFICATION	
Radial and Axial Acceleration (X, Y, Z, θ)	Range	$\pm 500g$, up to 5,000 Hz (-3dB BW)
Torsional Acceleration	Range	87,000 rad/s ² , 5,000 Hz (-3dB BW)
RPM	Range	$\pm 5,000$ RPM
Temperature Measurement	Range	-40 to 190°C
	Accuracy	$\pm 1.5^\circ\text{C}$ rms
	Precision	0.02°C rms
Weight-on-Bit	Sensor Range	$\pm 75,000$ lbf
	Accuracy	$\pm 4\%$
	Precision	7 lbf rms (1 sec averaging)
Torque-on-Bit	Sensor Range	$\pm 30,000$ lbf*ft
	Accuracy	$\pm 3\%$
	Precision	1 lbf*ft rms (1 sec averaging)
Bending Moment	Sensor Range	$\pm 60,000$ lbf*ft
	Accuracy	$\pm 5\%$
	Precision	1 lbf*ft rms (1 sec averaging)
Annulus and Borehole Pressure	Sensor Range	0-25,000 PSI
	Accuracy	$\pm 0.04\%$
Data Recording	Acceleration	Up to 20,000 sps
	Bit forces	Up to 200 sps
	Pressures	Up to 200 sps
	Memory	Up to 500 hours of continuous high frequency data
Power Source	Internal Batteries	

Mechanical and Environmental Specifications

PARAMETER	675	
Nominal Collar OD, in. (mm)	6.75 (171.5)	
Maximum Collar OD, in. (mm)	7.05 (179.1)	
Mud Flow Channel ID, in. (mm)	2.25 (57.2)	
Tool Length, in. (mm)	73.20 (1860)	
Tool Weight, lbs	680	
Connections	NC50 Box-Pin	
Make-up Torque, ft-lb	30,000	
Maximum WOB, lbf	400,000	
Maximum Torque, ft-lb	70,000	
Overpull non-rotating, Operational, lbf	1,500,000	
Max DLS rotating, deg / 100 ft	10	
Max DLS sliding, deg / 100 ft	21	
Max Mud Flow Rate, GPM (< 2% sand)	750	
Max Operating Temperature, °F (°C), standard	302 (150)	
	high	329 (165)
	extreme	347 (175)
Max Operating Pressure, PSI,	standard	20,000
	high	25,000