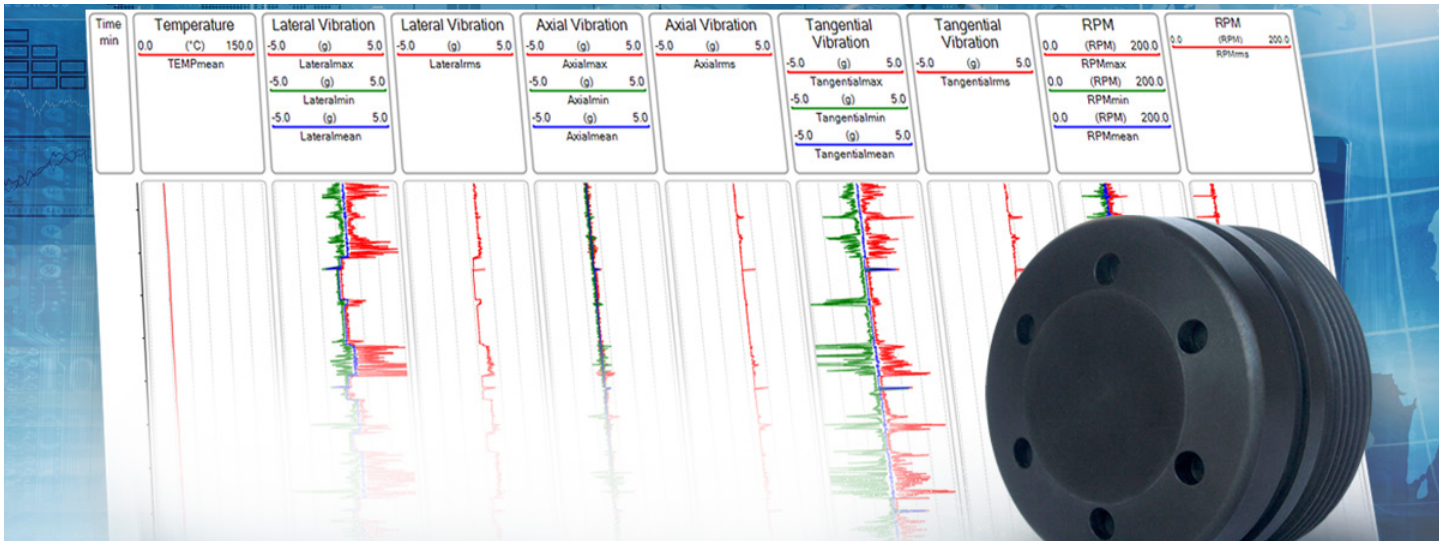
BlackBox Eclipse Downhole Measurement Tool



The **BlackBox™ Eclipse** downhole measurement tool is a descendant of the BlackBox Plug drilling dynamics memory-mode logging tool, offering additional features, increased accuracy, and higher resolution. The BlackBox Eclipse tool is deployed in a BlackBox carrier sub, allowing for flexible placement in the BHA or the drillstring. The tool is user-configurable to capture an array of measurements, including multi-axis vibration, temperature, and rotation. Through application of extensive knowledge and experience, the BlackBox Eclipse tool can help deliver custom solutions to drilling challenges by maximizing performance and reducing well delivery costs.

Features and Benefits

Flexible deployment options—carrier sub sizes range from 4.75 to 9.5-in. OD

- Allows for various data collection techniques

Gyro RPM sensors

- Provides accurate data at all speeds and with all carrier sub sizes

Three-axis vibration measurement

- Captures detailed downhole behavior

Continuous and burst data

- Captures high-frequency data for analysis

User-configurable data rates

- Enhances flexibility to enable use in complex projects

Field-replaceable electronics

- Minimizes tool downtime

Sensor Measurement and Accuracy

Three-axis vibration (XYZ-axis).....-200 to +200G (±1G)

RPM.....0 to 250 RPM (±1 RPM)

-1,000 to 1,00 RPM (±5 RPM)

Temperature.....-40 to 302°F (-40 to 150°C) (±37°F / 3°C)

General Specifications

Material.....High-strength steel alloy

Rated pressure.....25,000 psi

Rated temperature.....302°F

Battery life.....Up to 200 hr*

Memory storage.....128 MB

Data rate.....User-configurable statistical continuous data rates up to 800 Hz
User-configurable interval burst settings

Data representation.....Statistical max, min, mean, and RMS

*Results may vary with configuration

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