

Advanced vibration, rotation, and temperature measurements allow for customized solutions and optimized drilling performance

As the newest revision of the BlackBox™ family of tools, NOV's BlackBox Eclipse tool is capable of recording accurate RPM, three-axis vibration, and temperature in downhole drilling environments. Our memory-mode logging tool is capable of being deployed in various size carrier subs for maximum placement flexibility in the BHA or drillstring. With its compact design and the similar size of prior BlackBox Plug models, the BlackBox Eclipse tool gives critical measurements while minimizing downhole footprint.

The BlackBox Eclipse tool reads sensor data at rates up to 800Hz and records statistical data (maximum, minimum, mean, and RMS) to memory at user-configurable rates, providing unmatched accuracy and value, small footprint, and versatile deployment options. Burst is also available and configurable by the end user to meet individual client needs. The BlackBox Eclipse tool facilitates the identification of a variety of drilling inefficiencies, including:

- Lateral downhole vibration in multiple positions
- Torsional and RPM oscillations (stick-slip)
- Procedural issues, such as damaging off-bottom practices

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 measurements

• Captures detailed downhole behavior

Continuous and burst data

Accurately captures high-frequency data for post-well analysis

User-configurable data rates

 Allows for flexible project needs and enhances product versatility

Field-replaceable electronics

• Minimizes tool downtime

The BlackBox Eclipse tool will increase a well's operational cost-effectiveness by improving performance, drilling efficiency, and well quality on future wells by providing comprehensive memory data for post-well analysis. By optimizing drilling aspects such as vibration management, torsional oscillations, and parameter selection, the BlackBox Eclipse tool can reduce the potential to damage future drillstrings and the number of required trips. Showcasing its enormous utility, the tool can be run with any combination of additional BlackBox family memory tools or other eTools located at the bit, BHA, or drillstring.

Contact your local NOV representative or visit us online to learn how the BlackBox Eclipse tool can provide accurate, high-quality data to increase efficiency and optimize drilling performance.



