

Mining - Geotechnical  
Sale - Rental

# DeviGyro

## Continuous High Speed Non-Magnetic Survey

The **DeviGyro** is a driller operated survey instrument supporting high speed continuous surveying, overshoot mode and even core orientation.

With its revolutionary small size and proprietary algorithms the **DeviGyro** is the perfect choice for all survey applications where efficiency and accuracy are required, independent of hole direction, inclination and location.

Surveys can be completed in continuous mode at speeds up to 100 m/min (successfully tested up to 185 m/min) or in multishot mode with short stops at set intervals. No matter the survey mode the data always passes through an automatic and instant go/no-go quality check ensuring the results are always of the highest quality.



### Applications

- Underground Diamond Drilling; Wireline, Pump down or conventional
- Surface Diamond Drilling
- Overshot mode
- Pilot holes
- Reverse Circulation (RC)
- Blast & injection holes
- Production holes
- Geotechnical investigations
- Core orientation

### Benefits

- Continuous survey operation
- In-rod surveying – not affected by magnetics
- No angle restrictions
- Automatic and instant quality assurance
- Same high accuracy in any inclination, direction and location
- Extremely low weight & size and easy to handle
- Automatic multi-survey processing
- Highly robust and reliable
- Simple and intuitive software



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The **DeviGyro** is a miniature survey tool based on solid state gyro technology that detects and quantifies the deviation the instrument is subjected to as it traverses down the borehole.

The data from the **DeviGyro** passes through an automatic processing and quality assurance algorithm that ensures the accuracy and repeatability is always high, independent of the drill hole's direction, inclination and location.



## Depth Measurement

The **DeviCounter** digital wire counter is used to control the depth during wireline **DeviGyro** surveys. It connects wirelessly to the operating Handheld Device and stays connected through the survey run, continuously updating the display with high accuracy depth data. Further information is available in the **DeviCounter** brochure.

## Operating Software

An intuitive and easy to navigate Android application allows the user to start and perform **DeviGyro** surveys. It connects simultaneously to both the **DeviGyro** and **DeviCounter**, combining the data automatically and accurately. A quality assurance system is built into the application, giving the user confidence the data is always of the highest quality and accuracy.

## Operation

The **DeviGyro** can be fitted in a variety of running gear assemblies suitable for core drilling, RC, geotechnical drilling and open holes.

A survey with the **DeviGyro** will typically be performed on the wireline while continuously lowering or retrieving the instrument. The running gear can be connected directly to the wire or to a standard overshot, and may be lowered or pumped into the borehole at high speed while surveying. Survey data can be recorded both during the in and out run for comparison and additional quality control.

With its low drift sensors and long life battery pack, the **DeviGyro** may be used over long durations, in vertical, inclined, horizontal or up-holes without affecting accuracy.

## North Seeking Package

Combined with the **DeviAligner** (surface & underground) or **DeviSight** (surface) the **DeviGyro** becomes a very powerful north seeking package that secures superior accuracy even in high latitude locations. See respective brochures for further information on **DeviAligner** and **DeviSight**.

## Maintenance

With its miniature size and robust sensors the **DeviGyro** requires very little maintenance and repair. Cleaning of the centralizers is recommended after every survey run.

## Technical Specifications

### Survey tool

|                      |                                |
|----------------------|--------------------------------|
| Weight               | 0.2kg /0.5lbs                  |
| Diameter             | 25mm /1"                       |
| Length               | 140mm /5.51"                   |
| Magnetic             | No                             |
| Survey modes         | Continuous or multishot        |
| Inclination accuracy | $\pm 0.1^\circ$                |
| Direction accuracy   | $\pm 0.1^\circ/100m$ (typical) |
| Tool face accuracy   | $\pm 0.2^\circ$                |
| Inclination range    | +90 to -90°                    |
| Temp range           | -20°-60°C /-4°-140°F           |
| Battery life         | 24hrs continuous use           |
| Pressure             | 10bar/145psi                   |
| Positional Accuracy  | 0.2% (typical)                 |

### Standard running gear

|          |                |
|----------|----------------|
| Weight   | 1.6kg/3.5lbs   |
| Diameter | 40mm/1.57"     |
| Length   | 1500mm/59"     |
| Pressure | 300bar/4350psi |

### Handheld device

|                   |                      |
|-------------------|----------------------|
| Type              | Rugged smartphone    |
| Software          | DeviGyro android app |
| Battery life/type | 15 hours/Lithium     |
| IP rating         | IP68                 |

