

GYROMAT 3000

Fully Automatic Precision Gyroscope

The GYROMAT instrument series is a range of high precision surveying gyroscopes with band suspension, which are the result of more than 60 years of experience in the development and manufacture of gyroscopic measuring instruments. The fully automatic measuring procedure and measurement technique that has no any preliminary orientation provide the greatest accuracy in determining direction in those areas in which other methods cannot be efficiently used, for example in mining and tunnelling.

The GYROMAT 3000 has for many years been a reliable instrument for measuring directions with an accuracy of 1/1000th gon, which corresponds to a deviation in arc of about 1.6 cm over a distance of one kilometre. The time needed for measuring a single direction is about 10 minutes. This time can be reduced by applying two other survey programs, but the measuring accuracy is also reduced. The option to add a theodolite or a total station as required enables the instrument to be used universally for geodetic applications or control work.

GYROMAT 3000

- Maximum measuring accuracy
- Fast and fully automatic measurement sequence
- No need for pre-orientation
- Customer defined total station or theodolite set up



Special Design Features

- Ergonomically designed instrument with integrated batteries
- Three serial interfaces (RS 232) to connect to a PC, a total station or other devices
- Wireless remote control and data transmission via Bluetooth®
- Two operation panels with integrated multiline display and keyboard
- Menu-controlled, interactive operation
- Integrated monitoring plus comprehensive history and help functions

| Technical specifications | | | |
|---|---|----|----|
| Measuring modes | 1 | 2 | 3 |
| Measuring accuracy in mgon* | 1 | 10 | 5 |
| Measuring time in minutes (approx.) | 10 | 2 | 5 |
| Battery capacity for single measurements | 25 | 50 | 35 |
| Operating temperature | -20 °C up to + 50 °C (-12 °C up to + 45 °C calibrated) | | |
| | | | |
| Area of application | Between 80° south latitude and 80° north latitude | | |
| | | | |
| Dimension and weight: | | | |
| GYROMAT 3000 (without theodolite) | 11.5 kg, 215 mm centering diameter | | |
| Transport container | Weight: 26 kg, (LxWxH) 460x460x800 mm | | |
| Tripod | Weight: 8 kg, 300 mm diameter | | |
| *) Standard deviation (±1σ) under lab conditions in accordance with DIN 18723 | | | |
| Subject to technical change | | | |



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