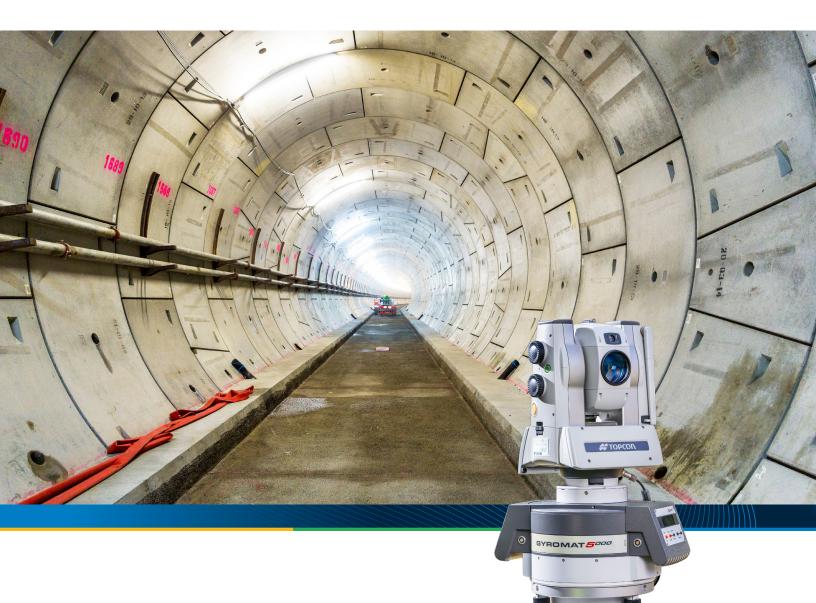
GYROMAT 5000

Precision-Surveying Gyroscope



Optimized performances for tunneling and mining applications



Measure true north regardless of environmental factors

The GYROMAT instrument series is a collection of high-precision surveying gyroscopes with band suspension. The fully automatic measuring procedure and measurement technique, which require no preliminary orientation, provide the highest accuracy in determining direction in areas where other methods are not efficient, such as mining and tunnelling.

The GYROMAT 5000 is the latest product for high-precision direction measurement, boasting an accuracy of 2.6" (0.8 mgon). This corresponds to a deviation in arc of about 1.2 cm over one kilometer. The time required for measuring a single direction is only about 6 to 9 minutes. The new piezodrive, with a highresolution angle encoder, supported by a reliable energy buffer and exchangeable battery makes the system faster, safer and easier to maintain.

- » Utmost accuracy
- » Shorter measuring time
- » Fully automatic measurement
- » No pre-alignment necessary
- » Individual MS AXII mounting
- » Hot swapping battery option

The GYROMAT 5000 is fully compatible with Topcon MS AXII solutions, providing optimal performance for tunnelling and mining applications.

Measuring modes

| Mode | 1 | 2 | 3 |
|-------------------------------------|---|-----------------|--------------|
| Measuring accuracy (mgon)* | 2.6" (0.8 mgon) | 16.6'' (5 mgon) | 6.6" (2 mgon |
| Measuring time in minutes (approx.) | 6-9 | 3-5 | 4-7 |
| Measurements per battery charging | 25 | 50 | 35 |
| Environmental | | | · |
| 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 | | |
| Physical | | | |
| Dimension and weight | 11.5 Kg, 215 mm centering diameter(GYROMAT 5000 without theodolite) | | |
| Transport case | Weight: 26 kg / Dimensions: (L x W x H) 460 x 460 x 800 mm | | |
| Tripod | Weight: 8 kg / Dimensions: 300 mm diameter | | |

* Standard deviation (±1 σ) under lab conditions in accordance with DIN 18723 Subject to technical changes

