

GYROMAT 6000

The Most Accurate Precision-Surveying Gyroscope in the World

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 6000 is the latest product for high precision direction measurement with an accuracy of 0.8/1000th gon, which corresponds to a deviation in arc of about 1.2 cm over a distance of one kilometre. The time needed for measuring a single direction is only about 6 to 9 minutes. The new Laser Collimation Control system (LCC) makes it possible to detach the Total Station from the GYROMAT 6000. Model variants with detachable or permanently installed total station are available, allowing the device to be used universally and conveniently for geodetic applications or control work. In addition, the LCC can be used to perform internal stability tests under field conditions to provide the user with reliable measurement data with greater certainty.

GYROMAT 6000

- Utmost accuracy
- Shorter measuring time
- Fully automatic measurement
- No pre-alignment necessary
- Model versions with removable or permanently installed total station
- Spare Battery



GYROMAT 6000

Special Design Features

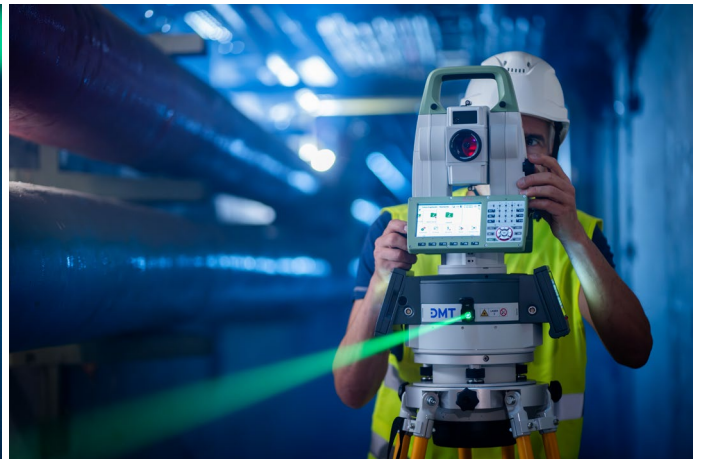
- Built-in laser collimation control (LCC) for setting up and stability checks
- Ergonomic design with only one rechargeable battery
- More precise piezoelectric drive with high resolution angle encoder
- Gyro measuring system with a reliable intermediate energy storage system
- Wireless remote control and data transfer
- Wired interfaces (USB / RS-232) for control and data transfer
- Graphic display with extended visualization and functional scope

Technical specifications

Measuring modes	1	2	3
Measuring accuracy in mgon*	0.8 (1.6**)	5	2
Measuring time in minutes (approx.)	6-9	3-5	4-7
Measurements per battery charging	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		
Laser Collimation Control	Laser: Green (520nm) - Class 2		
Dimension and weight:			
GYROMAT 6000 (without theodolite)	11.5 Kg, 215 mm centering diameter		
Transport case	Weight: 26 kg, (L x W x H) 460 x 460 x 800		
Tripod	Weight: 8 kg, 300 mm diameter		
*) Standard deviation ($\pm 1\sigma$) under lab conditions in accordance with DIN 18723			
**) Version with detachable Total Station			
Subject to technical changes			



GYROMAT 6000 Laser Collimation Control



Measurement with GYROMAT 6000

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Disposal information: :
 Our products are subject to the WEEE directive.
 DMT has committed itself to take back all
 electrical and electronic components sold
 and to dispose of them professionally.
 Please contact: products@dm-tgroup.com

WEEE Registration Number: **DE 25917380**



DIN EN ISO 9001
 DIN EN ISO 14001
 DIN ISO 45001

