

GAIA-FIELD 1.2

Advanced MEMS Gravimeter with Automatic Gimbal.

GAIA-FIELD offers previously unheard-of benefits for practical field gravimetry.

- Highly robust and proven resonant MEMS sensor
- Automatic remote gimbal levelling with 12° tilt range
- Exceptionally robust, compact and portable
- Remote operation using any smart device is faster and reduces local vibration and tilt effects from operators
- **NEW 1.2 Features**
 - Enhanced gimbal range $\pm 12^\circ$
 - Enhanced operating range to 50 °C
 - Multiband GNSS with external antenna
 - Alpha correction: stable linearity <6 h after power-on



Trenching &
Excavation
Planning



Detect & Map
Buried
Infrastructure



Geophysics &
Environmental
Monitoring



Earth Observation
& Climate
Monitoring

Key features

- | High Sensitivity: <0.01 μGal resolution & 5 μGal standard deviation at 60-120s
- | Automatic Levelling Gimbal: $\pm 12^\circ$ tilt range
- | Rapid Measurements: Instrument levelled and reading in as quick as 10s
- | Compact & Portable: 5.2 kg total weight, hand carried, any orientation
- | Rugged & Reliable: IP68 (closed), IP65 (open), proven in the field.
- | Flexible: Battery & USB powered, Wi-Fi, USB-C connectivity



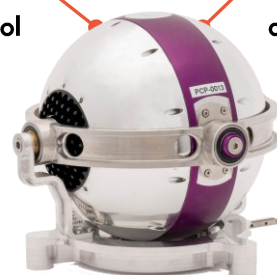
GAIA Physics Core

At GAIA-FIELD's heart, the Physics Core maximizes our MEMS performance in real-world applications.

- Outstanding long-term stability
- Highly repeatable measurements
- Faster startup, stabilization and measurement
- Highly robust in transport and field conditions

Vacuum-sealed SMG
VBA MEMS sensor with
precise thermal control

Advanced digital
resonance tracking unit
and low noise electronics

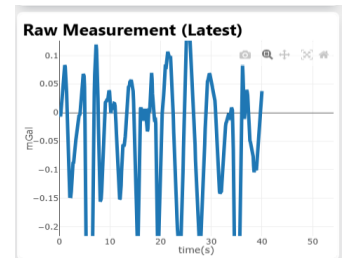


Market leading sensitivity with enhanced portability, automation and connectivity.

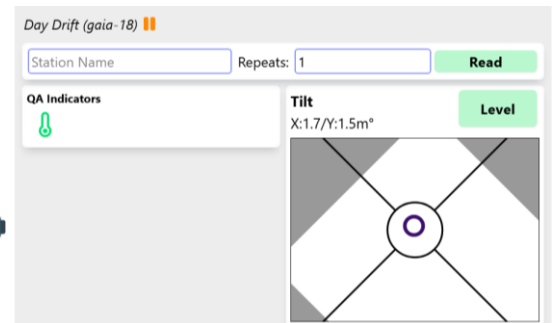
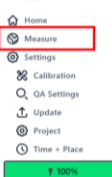
GAIA-FIELD 1.2 Specifications

Sensor Type	SMG VBA Resonant MEMS
Reading Resolution	<0.01 μ Gal
Standard Deviation	<5 μ Gal @ 60-120 seconds
Measurement Range	+/- 2000 gal (+/- 2 g)
Operating Range	-40 °C to +50 °C
Residual Drift	<5 μ Gal / 6 hours
Tares	<2 μ Gal for shocks up to 50 g
Automatic Levelling	+/- 12 ° range to <2 m° accuracy
GNSS	Multi-band high-precision GNSS for up to 1 cm position (condition dependent)
GNSS Antenna	Surface-mounted multi-band active antenna
Rapid deploy base	Robust static ground plate +/- 15 ° levelling
Onboard Corrections	Tide, instrument tilt, temperature, drift Alpha correction
Connectivity	USB-C, Wi-Fi
Data output rate	20 Hz via CSV export
Data storage	Onboard storage with real time access 2x SD card for triple redundant backup
Battery Life	20-24 hours at 10-30 °C
Battery Type	2x hot swappable 6.8 Ah Lithium Ion
Weight	5.2 kg including tripod
Dimensions (mm)	270 w x 246 d x 180 h

Real time data, project planning, calibration and analysis via any web enabled device



Live reading display



Automatic levelling and virtual spirit level

Designed for Real World Field Surveys

Market leading sensitivity with enhanced portability, automation, and modern connectivity, make GAIA-FIELD an ideal solution for terrestrial gravity surveys.

- In system or external battery charging
- Separate Static Levelling Base for uneven or unstable ground
- Automatic gimbal for fine adjustment with live tilt via user interface
- Hot swap batteries with live battery status
- Internal GNSS for PPK (RTK via future software update)



GAIA-FIELD 1.2

with active GNSS antenna

GAIA-FIELD System Contents

- GAIA-FIELD 1.2 Gravimeter
- GAIA-FIELD Ground base plate
- 2x Rechargeable Battery Packs
- Standalone Battery Charger
- GAIA Field USB-C Charger
- Optional Full System Transport Peli Case

Training and Support

SMG Gravity are passionate about gravity measurements and surveys, built on a foundation of physics and practical metrology.

We offer full product and gravity training, consultancy and support. Our field engineers are available to support your surveys or survey teams.