Dynamic gravity Systems, (DgS), produces the latest generation of Airborne and Marine gravity meters. We also refurbish and upgrade any zero length spring based dynamic gravity meter to the latest “state of the art” system.

The Advanced Technology (AT) used by Dynamic gravity Systems enables us to provide the highest performance dynamic gravity meters available. The AT systems have high resolution and low noise as well as being reliable and easy to setup and operate.

The new and upgraded systems feature full feedback magnetic damping, a new and improved platform control system, integrated high performance, temperature-controlled electronics and a simplified, user-friendly data display and system control interface which can be operator optional.

MAIN FEATURES
- High resolution 1Hz Marine or 10Hz Airborne gravity, integrated GPS position and timing
- Full feedback, magnetically damped sensor locks the beam at the reading line, minimizing sensor errors, eliminating mechanical counter screw errors and virtually eliminates cross coupling errors
- Improved accuracy and repeatability in rough marine or turbulent airborne survey conditions
- Enhanced reliability and lower maintenance/calibration requirements
- No spring tension motor or counter screw required—eliminates mechanical failures
The new and upgraded systems use a full feedback system integrated with magnetic damping to keep the beam at the reading line of the sensor. The feedback system has worldwide range with no need for a measuring screw to adjust spring tension or reset the range. The system has an extremely fast response time, extremely low cross-coupling errors and a much lower susceptibility to aircraft turbulence up to +/- 0.5 g or rough sea conditions.

SPECIFICATIONS

- Worldwide gravity range
- Resolution: 0.01 milliGals (mGal)
- Static Repeatability: 0.05 mGals
- Dynamic Repeatability:
  - 0.25 mGal @ 50,000 mGal horiz
  - 0.50 mGal @ 100,000 mGal horiz
  - 0.25 mGal @ 100,000 mGal vert
- Accuracy at sea 0.7 mGals
- Platform Range 30° roll and pitch
- Platform Period 4 minutes
- Data and GPS recording rate 1Hz for Marine and 10Hz for Airborne
- INS platform control for Airborne
- Dimensions approx.: 71 x 56 x 84 cm and 80 kg, UPS 25 kg
- Power Consumption: 60 Watts Av, 150 W Max. 80-265 VAC Input

Sample data from airborne full feedback system.

A single survey line was repeated six times and then processed with a 150-second filter. The standard deviation of the repeated lines is 0.43 milliGals

www.dynamicgravitysystems.com