



GEOMETRICS

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2190 Fortune Drive, San Jose, CA 95131 USA • www.geometrics.com

Portable Proton Magnetometer Model G-857

- **0.1 nT resolution and sensitivity**
Designed for ease of use by non-skilled personnel
- **Digital memory - 65,000 readings**
- **Manual data recall, or down load to a PC**
- **Versatile - total field or gradiometer surveys or base station applications use.**
- **Rugged weatherproof construction.**
- **Console records GPS position from optional Garmin Oregon450**

The G-857 provides a reliable, low cost solution for a variety of magnetic search and mapping applications. Single key stroke operation means the G-857 can be operated by non-technical field personnel or used in teaching environments. The G-857 uses the well-established proton precession method, allowing accurate measurements to be made with virtually no dependence upon variables such as sensor orientation, temperature, or location. The unit provides a repeatable absolute total field magnetic reading, traceable to the National Bureau of Standards, unlike



G-857 and Optional Garmin GPS



G-857 Standard System

other magnetic field measurement processes which measure only a single component of the field. The unit offers features such as GPS time synchronization, GPS positions in in-field navigation with a hand held Garmin GPS.

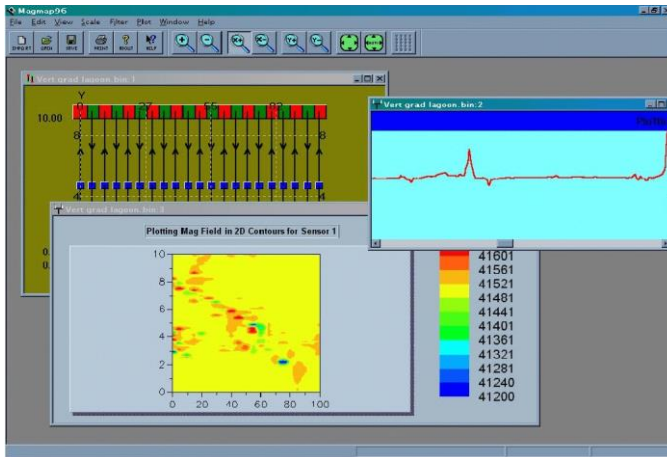
Applications:

The G-857 is ideal for mapping geological structures, for mineral exploration, magnetic search for industrial, environmental or archaeological targets. The optional gradiometer attachment gives greater resolution and noise immunity for conducting searches in industrial or high cultural noise environments. Simple operation, large digital data storage capability, and the inclusion of MagMap2000 data transfer and editing software provides a system well suited for both teaching and survey applications.

The automated cycling option with long sensor cable and external power connection allows the G-857 to be used as a base station instrument for the measurement of diurnal changes in the Earth's magnetic field. Diurnal correction data is then downloaded using MagMap2000 and can be applied to other land or airborne magnetometer data.

Superior Data Editing Software:

MagMap2000 allows rapid download of the data from the G-857 to a PC. Data can be diurnally corrected, profile lines and positions displayed and edited, noisy readings filtered and QC plots of profiles, 2D contour and 3D surface plots made. Data can be exported to Surfer, Geosoft or MagPick (free from Geometrics) for more sophisticated final maps and analysis. The software requires Windows 98, NT, XP or newer operating system.



MagMap2000 Display Screen

The G-857, based on the popular G-856AX, provides excellent performance and is the lowest priced professional magnetometer system available. Combined with the ease of use, user friendly download/editing software, and readily available commercial contouring programs, the G-857 represents a complete magnetic surveying package generating high quality data for budget conscious users.



G-857 Base Station and Optional Garmin GPS

Specifications:

Resolution: 0.1 nT

Accuracy: 0.5 nT

Clock: Julian date, accuracy 5 sec per month.

Tuning: Auto or manual, range 20,000 to 90,000 nT

Gradient Tolerance: 1000 nT/meter

Cycle time: 3 sec to 999 sec standard can be manually selected as fast as once every 1.6 seconds.

Read: Manual, or auto cycle for base station use.

Memory: 65,000 field or base station readings

Display: Six digit display of field/time, three digit auxiliary display of line number, day

Digital Output: RS-232, switch selectable to 115200 baud.

Digital Input: Will accept external cycle command.

Physical: Console: 7 x 10.5 x 3.5 inches, (18 x 27 x 9 cm) 6 lbs (2.7 kg)
Sensor: 3.5 x 5 inches (9 x 13 cm) 4 lbs (1.8 kg)

Environmental: Meets specifications within 0° to 40°C (32° to 105°F)
Will operate satisfactorily from -20° to 50°C (-4° to 122°F)

Power: 12 Volt rechargeable Gel Cell

Standard Accessories:

Sensor, Staff, Chest Harness, Two sets of batteries, RS-232 cable, USB Serial adapter, Operations manual, Applications manual, MagMap2000 software

Options: Gradiometer attachment. External power/RS-232/sensor cable, rechargeable battery and charger set, Garmin Oregon 450 GPS

For More information contact:

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