

## Portable Proton Magnetometer Model G-857

- **0.1 nT resolution and sensitivity**
- **Designed for use by experienced and non-skilled personnel**
- **Digital memory - 65,000 readings**
- **Manual data recall, or download to PC with MagMap2000 software**
- **Versatile - total field, gradiometer surveys or base station applications**
- **Rugged weatherproof construction**
- **Console records GPS position and time from Garmin Oregon 450**
- **GPS in-field steering option**

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



G-857 and Optional Garmin GPS



G-857 Standard System

absolute total field magnetic reading, traceable to the National Institute of Standards and Technology.

Optional GPS provides GPS time or time synchronization for console, lat/long data positions and can be uploaded with GPX survey routes for in-field navigation.

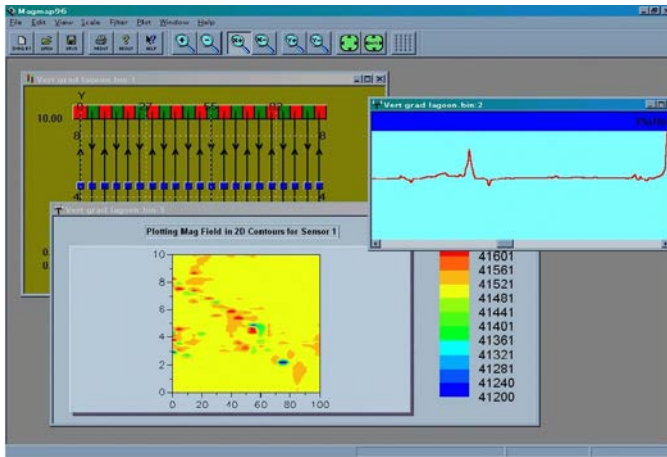
### Applications:

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 XP, 7, 8 or 8.1 or newer operating system.



MagMap2000 Display Screen

The G-857, based on the popular G-856AX (over 2,800 units sold), 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:** Absolute 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:** 1.6 sec to 999 sec standard.

**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: