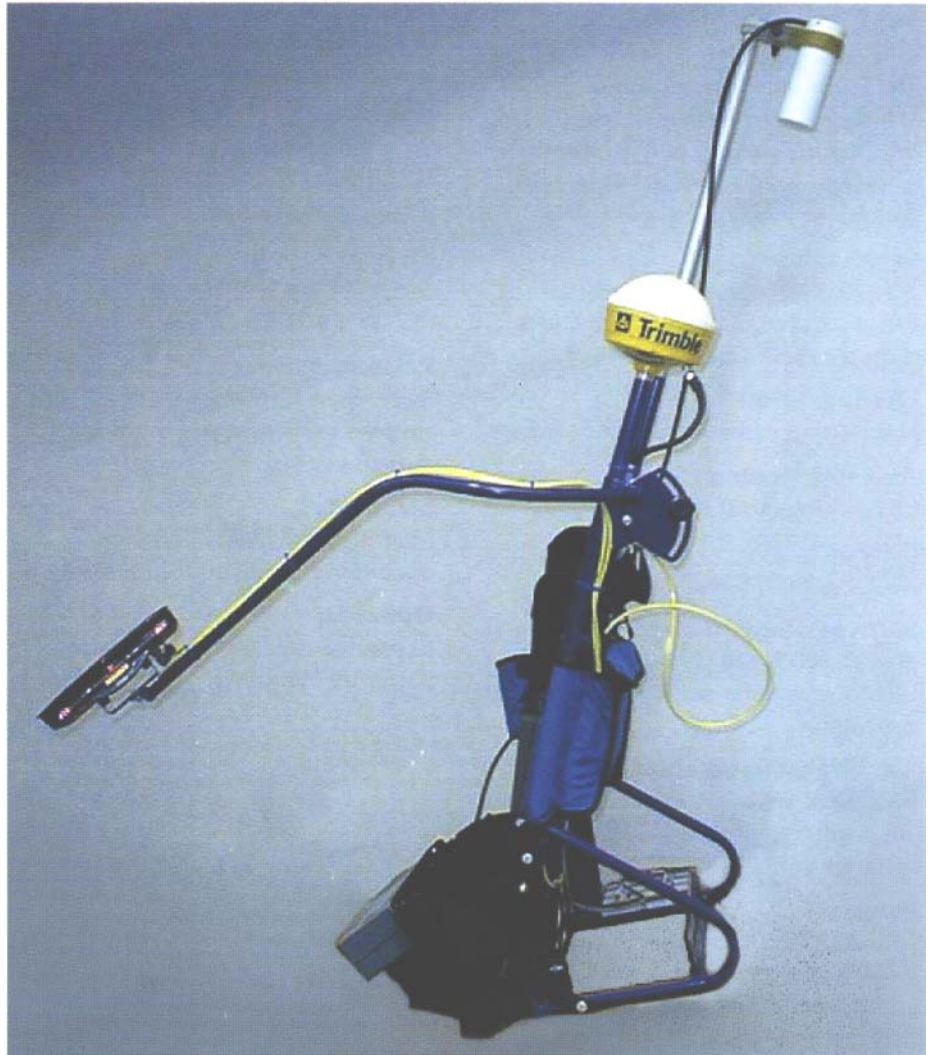




G-858 MagMapper with AG114

- MAGNETOMETER INTEGRATED WITH DIFFERENTIAL GPS for Complete Survey Navigation
- CUSTOM DESIGNED LIGHTWEIGHT NON-MAGNETIC BACKPACK with sensor-antenna poles & battery tray
- VERY HIGH MAG SENSITIVITY - 0.004 nT/Hz RMS and POSITION ACCURACY <1m rms
- REMOVES THE NEED FOR LAYING OUT LINES and surveying grid prior to survey - Saves time and money!

The Geometrics high sensitivity Cesium Vapor Magnetometer model G-858 MagMapper has been integrated with the new Trimble ag114 GPS for single man-carry operation. This superb duo provides unprecedented ability to perform magnetometer or electromagnetic surveys without prior layout of the survey grid, saving substantial time, effort and money. The ag114-GPS is a complete GPS in one small package that employs The Choice technology. It features an L1 GPS with the ability to access a satellite differential correction service or Coastguard beacon to acquire RTCM SC-104 differential signal and calculate sub-meter positions in real-time. The Trimble Parallel Swathing Option lightbar mounted on a Geometrics supplied non-magnetic backpack provides users with real-time steering information allowing survey on a predetermined grid without markers. This technology provides sub-meter navigation and position fix of MagMapper, OhmMapper, MetalMapper, EM61 or other logged survey data when using the 858 console as the datalogger.



Our MagMap2000 data processing software then uploads the combined data from the 858 DataLogger, linearly interpolates the positions and provides each datapoint from magnetometer (or other recorded device) with its own Lat/Long or UTM coordinate location. The GPS positions are imported into MagMap2000 for editing, correcting and plotting of the data and then exported to Surfer or Geosoft for additional analysis. Differential Satellite Corrections are supplied by either Racal or Omnistar satellite service or by Coastguard beacon, allowing operation at most latitudes without the use of a GPS basestation or radio link.

The primary applications are environmental survey, target search and mining exploration programs. Because some survey applications (such as archeology and UXO/EOD) require centimeter accuracy and because some surveys occur under heavy tree canopy or highly variable local terrain conditions, the system may not be suitable for all situations. Nevertheless, it represents an easy upgrade path for new and existing G-858 console users who wish to expand their survey capabilities and minimize costs.

Specifications:

MAGNETOMETER:

Operating Principle: Self-oscillating split-beam Cesium Vapor (non-radioactive)

Operating Range:
20,000 to 100,000 nT

Operating Zones:
The earth's field vector should be at an angle greater than 6 from the sensor's equator and greater than 6 away from the sensor's long axis. Automatic hemisphere switching.

Sensitivity:
< 0.008 nT/ Hz rms. Typically 0.05 nT P-P at 0.1 second or 0.01 nT P-P at 1 second sample rate.

Heading Error:
±1.0 nT (over entire 360 spin and tumble)

Absolute Accuracy:
< 2 nT throughout range

Output:
RS-232 at 9600 Baud

Software Support:
MagMap2000 full GPS support with UTM Conversion and contour map generation

Non-Magnetic all aluminum backpack with battery tray:
Total weight with mag, GPS and batteries is 35 lbs.

Power:
24 to 32 VDC, 0.75 amp at turn-on and 0.5 amp thereafter, with GPS is additional 0,75 amp, or three hours operation per pack.

AG 114 DGPS:

Receiver:
Receiver is programmed via PC using Trimble AgRemote.exe software

Differential Correction:
Built-in virtual reference station (VRS) ensures satellite differential correction uniformity. RTCM SC-104 and NMEA-0183 differential correction input

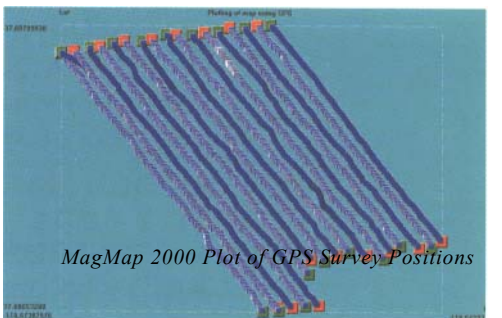
Weight:
0.76kg (1.68 lb)

Size:
14.5cm W x 5.1cm H x 19.5cm D
(5.7"W x 2.0"H x 7.7" D)

Position Accuracy:
Better than 1m RMS horizontal with sufficient satellites and multi-path reduction

Standard:
MagMap2000 Utility Software, operation manual and ship case

Optional:
Expanded capacity Battery Packs, Surfer for Windows.



*Combined
G-858 and
ag114 GPS
Survey System*

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