

G-862RBS Base Station Data Sheet

The high performance of the G-862 and its multi-function capabilities are well suited for many mobile survey applications and also for applications that require stationary monitoring of the total magnetic field. In addition to providing magnetic field measurements, the electronic circuits included in the G-862 provide the ability to concatenate its measurement data with the output of other RS-232 serial devices. This feature permits the G-862 to be integrated with other digital devices and to merge this combined data into a single digital stream for efficient transmission and storage.



G-862 magnetometer basestation configuration with GPS and data recording module. Image courtesy of Geometrics Inc

Because the G-862RBS's measurements are time stamped, and GPS synchronised, they are automatically synchronised with a similarly configured magnetometer system – whether it is stationary or mobile. The precise, synchronous records obtained from a mobile magnetic survey system and a stationary G-862RBS will permit the recognition and removal of both the diurnal variation of the Earth's field as well as higher frequency magnetic signal due to spherics.

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Magnetic measurements can be monitored in real-time using the MagMonitor Android app and a mobile phone or tablet. Data is transferred via Bluetooth at a range of up to 20m in order that an operator can monitor the status of the base station without influencing the measurements.

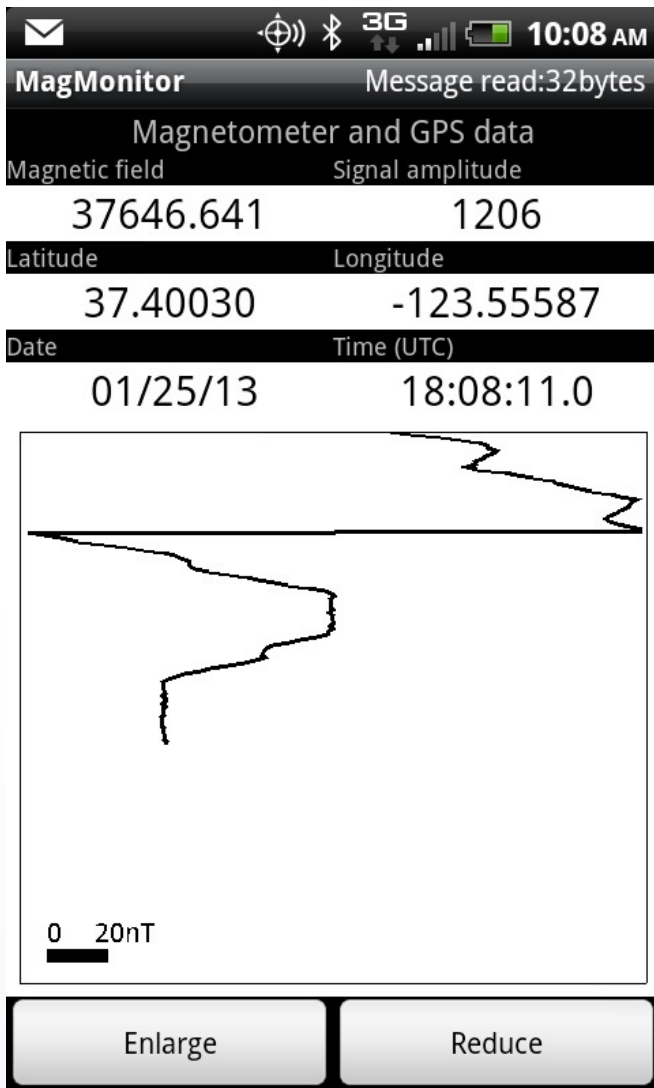
Product Dimensions

Physical	Dimensions (L x W x H)	Weight
(instrument only)	75cm x 75cm x 180cm	12.7kg

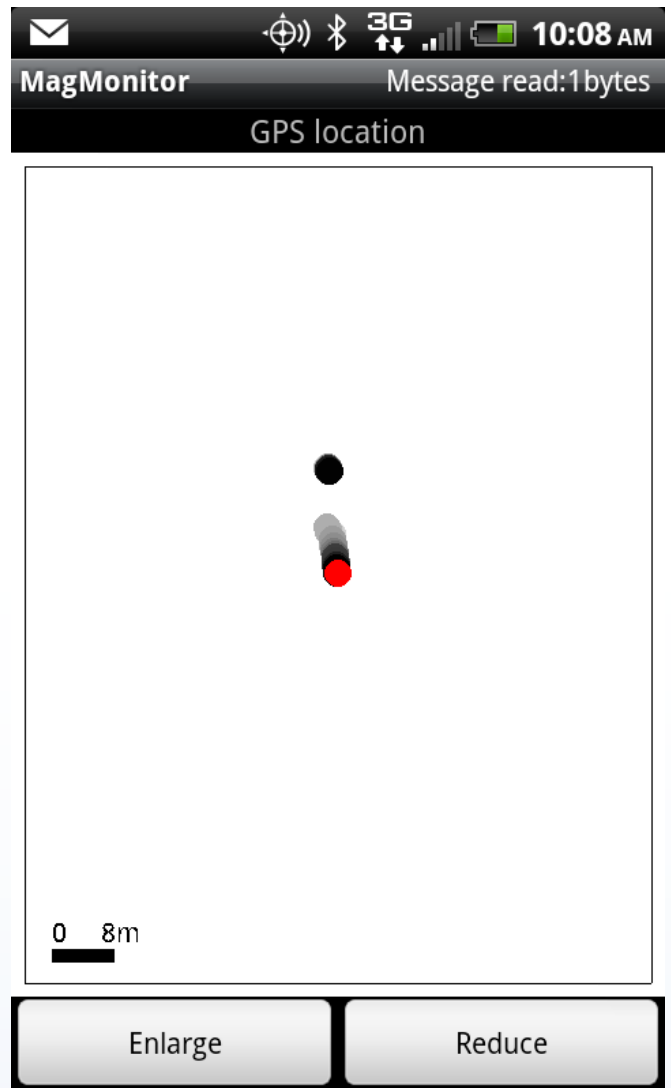
Technical Specifications

Sensor:	Self-oscillating split-beam Cesium Vapor (non-radioactive).
Operating Range:	20,000 to 100,000nT.
Sensitivity:	< 0.004 nT/√Hz rms. Typically 0.02 nT P-P at a 0.1 second sample rate.
Absolute Accuracy:	< 3 nT throughout range
GPS receiver:	Time accuracy; 20ns, RMS, max. data rate; 1 Hz.
Data Logger:	Serial logger, removable military grade USB memory stick.
Data Format:	ASCII, MS Windows PC compatible, FAT16 file format.
Capacity:	21 days using 1 Gb USB memory stick while recording at 10 Hz rate with GPS receiver output set to provide GPRMC data sentence.
Operating Temperature:	-35? C to +50? C.
Storage Temperature:	-45? C to +70? C
Altitude::	9,000m
Weatherproof:	O-Ring sealed for operation in the rain and/or 100% humidity.
Power:	10 to 36 VDC, 30 Watt. or 110-220VAC (50-60hz).
Communication:	USB, Serial or Bluetooth

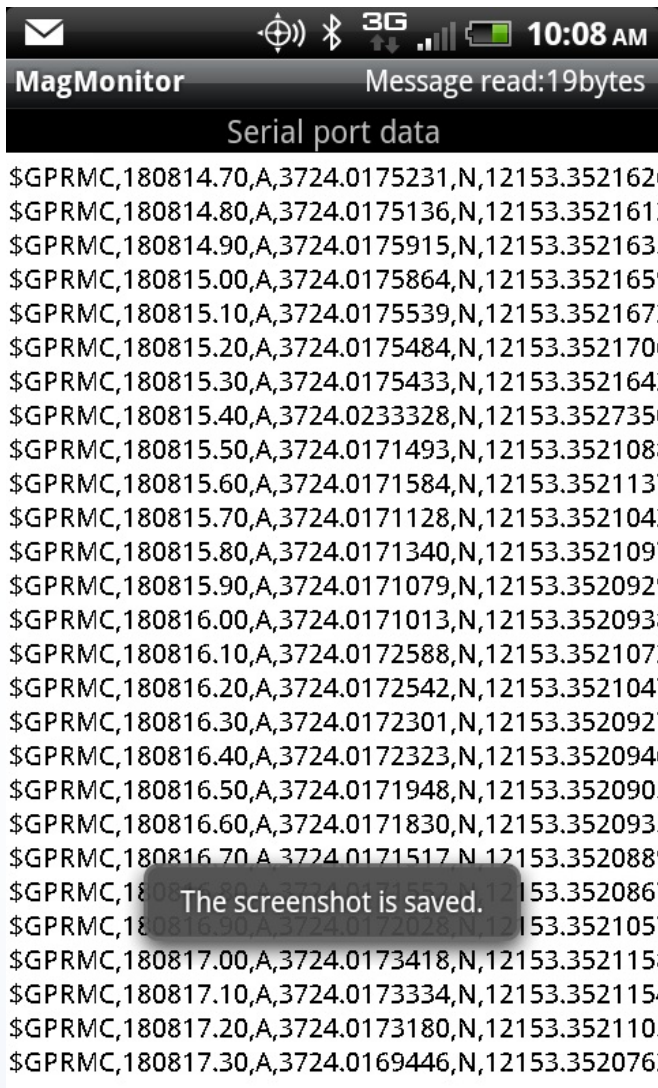
Gallery



Main screen of MagMonitor Android App depicting real-time graphical display of magnetic field and GPS position. Image courtesy of Geometrics Inc



GPS Screen showing spatial distribution of GPS position. Image courtesy of Geometrics Inc



Screen showing the serial data received by the G-862RBS.
Image courtesy of Geometrics Inc

Videos

<https://youtu.be/ihMWCDZpB6I>
<https://youtu.be/ihMWCDZpB6I>

<https://youtu.be/UtwOTWvVFJ8>
<https://youtu.be/UtwOTWvVFJ8>