

# G-864 Cesium Magnetometer



Geometrics' latest land magnetometer, the G-864 marries the highest quality cesium total field magnetometer available today with a modern user interface, making surveying easier and more efficient for years to come.

The G-864 cesium magnetometer utilizes a modified Android tablet, the Getac ZX70, as the data console. This offers users the ability to store large amounts of data as either a single or multiple projects. The Android tablet also incorporates a navigational display and the ability to preload survey lines, a feature that will direct users throughout the survey area. Preloading the survey lines, instead of using traditional tape measures and stakes to create the lines in the field, reduces setup time and crew size. Finally, logging data using a wireless platform eliminates the potential for snagging or breaking instrument cables during the survey.

The G-864 is well-suited for mineral exploration, civil and environmental engineering projects, UXO detection and archaeological surveys. With a maximum sample rate of 10 Hz, a noise floor at  $<0.004 \text{ nT}\sqrt{\text{Hz}}_{\text{rms}}$  the new G-864 allows for faster, more accurate surveys. Time is money, and the G-864 will help you save both!

For more information, or to speak with an applications geophysicist, contact us at [sales@geometrics.com](mailto:sales@geometrics.com).



## FEATURES & BENEFITS

- **Android™ Acquisition Software** - Modern user interface allows for WiFi communication and unlimited expansion of features.
- **GPS Navigation** - No Staking! Define survey geometry beforehand to limit field time.
- **Real-Time In-Field Data Review** - Plot GPS positions, analyze profiles, and create a color contour map before leaving the field.
- **Low Noise and High Sensitivity** - Create high-resolution maps when you measure smaller magnetic field variations
- **Data Redundancy** - Avoid data loss by storing data on the tablet and on the magnetometer simultaneously

**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 10° from the sensor's equator and greater than 10° from the sensor's long axis. Auto-matic hemisphere switching.

**Noise/Sensitivity:**  $< 0.004 \text{ nT} \sqrt{\text{Hz}_{\text{rms}}}$ . (SX (export) version:  $0.02 \text{ nT} / \text{Hz}_{\text{rms}}$ ).

**Max Sample Rate:** 10 Hz.

**Heading Error:** 0.15 nT over entire 360° equatorial and polar spins.

**Resolution:** 0.001 nT

**Gradient Tolerance:** 20,000 nT/m.

**Temperature Drift:** 0.05nT/°C.

**Power:** 24 to 35 VDC, 15 - 30 W to start and 20 to 35 VDC, 15 W to run.

**Data Logger:** Getac ZX70 Android tablet

**Data Storage:** 1 GB USB drive, 16GB on tablet.

**Data Format:** ASCII

**MECHANICAL/ENVIRONMENTAL**

**Backpack:** 4.3 kg (9.5 lb).

**Storage Temperature:** -45° C to +70° C (-48° F to +158° F).

**Operating Temperature:** -35° C to +50° C (-30° F to +122° F).

**Sensor Cable Length:** User selectable cable lengths of 3 or 9 ft. (0.9, 2.7m).

**Electronics Module Dimensions:** DIA: 7 cm; L: 38.7 cm;  
Weight: .91 kg (15.25 x 2.75 in; 2 lb).

**Sensor Dimensions:** DIA: 7 cm; L: 17.2 cm; Weight: .82 kg with cable.  
(6.75 in x 2.75; 1.8 lb).

**Weatherproof:** O-Ring sealed for operation in the rain and/or 100% humidity, Tablet: IP67 rated.

**Shock:** Survives a 3 ft drop onto a hard surface.

**Warranty:** 2 year, 3 year on Getac ZX70 tablet.

**Power:** 24 to 35 VDC, 15 - 30 W to start and 20 to 35 VDC, 15 W to run.

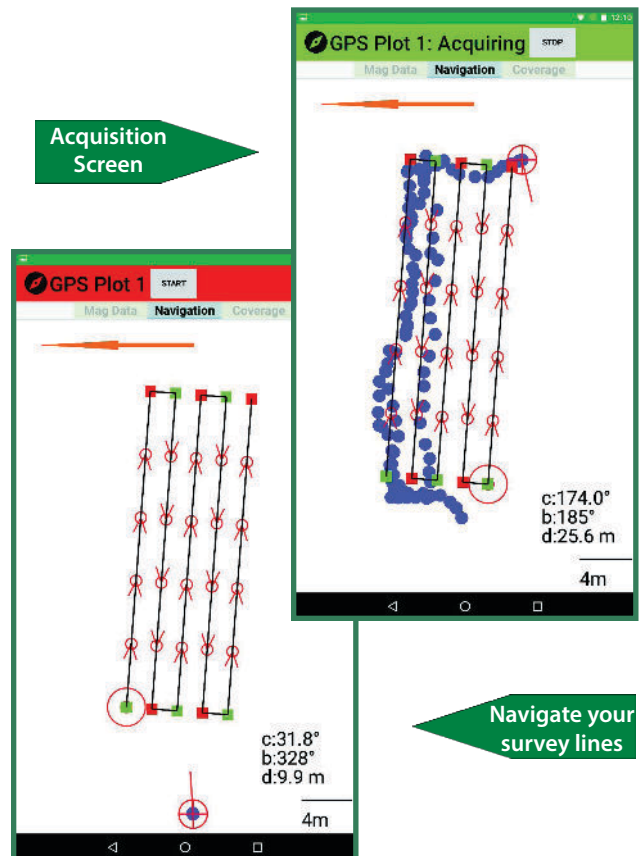
**Battery:** Lead acid 4.5 kg (10 pounds); or Li-Po 1 kg (2.2 pounds) options available.

**Standard Accessories:** Backpack, staff assembly, GPS, 2 batteries, charger, Getac Tablet, USB drive with user software and manuals, shipping/storage case, and power data cable.

**Battery Operation Time:**

**Lead Acid Battery** - 5 Hours - Single Sensor; 3 Hours - Gradiometer

**Lithium Ion-Polymer Battery** - 7 hours - Single Sensor; 5 hours - Gradiometer

**For Mineral, Geological, Engineering and Archaeological Exploration**

Acquisition Screen

Navigate your survey lines



Specifications subject to change without notice.

G-864AP (0723)