



PROTON MAGNETOMETER

Geological Structures

The magnetism of rocks, ores and geological structures in nature is uneven. Under the geomagnetic field, the magnetic inhomogeneity will cause the spatial distribution of the geomagnetic field to change. The magnetic field of magnetic bodies is superimposed on the normal geomagnetic field, and this superimposed magnetic field is called magnetic anomaly. By detecting magnetic anomalies with a proton precession magnetometer, the distribution of magnetic ore bodies and geological structures can be inferred.

After compared with other proton magnetometers, Geomative has spent two years developing a new generation proton magnetometer. It's light and portable. It uses a thermostatic crystal oscillator (OCXO) with high accuracy and stability to make it more stable.

Standard GPS supports GNSS, GPS, Beidou and GLONASS systems, which provides location and accurate time synchronization. The time synchronization accuracy reaches 30ms, which is more convenient to use.

It supports mobile, walk or base station mode. It is mainly applied in minerals exploration (such as iron ore, lead-zinc ore, copper ore, etc.), geophysical exploration in geological structures, archaeology, earthquake, volcanic activity research and long-term geomagnetic measurement stations.

Main Applications:

- Engineering investigation, such as pipeline deflection, etc
- Earthquake precursor monitoring, volcano observation and other environmental and disaster geological work
- Oil and natural gas exploration, research on geological structure and geotectonics related to oil and gas.
- Mineral exploration, such as iron ore, lead-zinc ore, copper ore, etc
- Base station magnetometer for aerial and marine magnetic survey
- Detection of small ferromagnetic objects, etc
- Fault location
- Archaeology
- Hydrology

Technical Specifications :

Alternate Model Number	GPM-10
Sensitivity	0.05nT
Dynamic Range	20,000 - 120,000nT
Absolute Accuracy	± 0.1nT
Resolution	0.01nT
Sample	3~60s @Mobile Mode. 3~3600s @Base Mode.
Gradient Tolerance	>5000nT/m
Remote Control	Optional remote control via RS-232 interface
Input/Output	RS-232 via 10 pin weatherproof connector with USB adaptor
Internal Memory	32MB (209715 readings in Manual Mode,699050 readings in Base Mode)
Dimension & Weight	Console: 220mm x 70mm x 175mm,1.57kg Sensors: 140mm(L) x 70mm(D);1kg
Operating Temperature:	-40°Cto+55°C

Unit Consists Of :

Part Description	Qty
GPM-10 Console	1 Unit
Harness / Charger	1 Unit
Sensor with Cable	1 Unit
Aluminium rod 50cm	1 Unit
Standard GPS	1 Unit
RS-232 Cable with USB Adapter	1 Unit
Casing	1 Unit

*1 Copy of Manual Instruction

Optional Accessories :

Part Description
GPM-10G - Console / Sensor with High Res GPS

