

INSTANT RESULTS

No need to rush back to your computer for readings, and no data loggers needed! Our advanced proprietary software provides real-time visualization of your surveys, allowing you to see the data as it's collected on a user-friendly touch interface.



NO NEED FOR TUNING

The AtomicX PPM is the only magnetometer on the market that requires no specific tuning for each location to accurately detect the Earth's magnetic field. Just press the ON button, and you're ready to go. It works straight out of the box, everywhere on earth!



NO NEED FOR SENSOR ALIGNEMENT

The AtomicX PPM's advanced toroidal sensor requires no alignment with the Earth's magnetic poles. Just move freely, without worrying about sensor orientation—perfect for dynamic and rugged survey conditions!

CONTACT US

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NEXT GENERATION PROTON PRECESSION MAGNETOMETER



WHAT YOU NEED TO KNOW

Proton Precession Magnetometers (PPMs) are precision instruments used in geophysical and archaeological surveys to measure the Earth's magnetic flux density. Although the magnetic field is locally uniform, it can be disrupted by subsurface materials with varying magnetic permeabilities. These disturbances may range from a few nanotesla (nT) to several hundred nT, depending on the nature and size of the anomaly.

The AtomicX PPM operates in two modes:

Search mode, where the user walks while scanning for anomalies.

Mapping mode, where measurements are taken on a predefined grid to produce detailed 2D magnetic maps.

The system includes a **high-sensitivity sensor**, a rugged electronics unit, a **long-lasting lithium-polymer battery**, and an Android tablet running the AtomicX software. The wireless, touch-based interface enables **real-time data visualization** in **graph**, **2D** map, or **3D** surface formats. The software automatically detects and filters erroneous measurements and displays key metrics such as signal strength and SNR for data integrity.

Advanced features include **extensive data filtering**, **over-the-air updates**, and **export** capabilities to formats such as CSV, JSON, and Surfer® DAT. **Data storage is virtually unlimited**, constrained only by the tablet's capacity.

Engineered for reliability, the system uses **solid-state switching** and polymer capacitors, housed in a **compact, rugged enclosure**. The sensor features high gradient tolerance, excellent EMI rejection, and is **orientation-independent**. Its sealed fluid chamber ensures maintenance-free operation.

The Pro model adds compatibility with lightweight, non-magnetic **carbon fiber accessories** and an integrated high-accuracy GNSS receiver supporting GPS, GLONASS, SBAS, and PPP—delivering sub-meter horizontal location accuracy (<1.0m).

TECH SPECS

General

Type	Proton Precession (EFNMR) Magnetometer
Operating Range	20000 – 100000 nT
Sensor Sensitivity	0.1 nT
Maximum Field	
Gradient	1200 nT/m
Absolute Accuracy	±0.5 nT
Resolution	0.01 nT
Sensor Polarization	1 – 5 seconds (User-configurable)
Measurement Cycle	1 – 120 seconds (User-configurable)

Hardware

Switching	Solid-state
Coil Tuning	Not required
Connectivity	Bluetooth LE 5.0
Battery Life	8 hours of continuous measurements 55 hours standby
Battery Type	External Li-Poly 14.8V, 4000mAh
Dimensions	
Toroidal Sensor:	10.6cm x 10.2cm (D x H)
Console:	10.6cm x 5.2cm x 15cm (W x H x D)
Weight	
Toroidal Sensor:	1.20 Kg
Console:	0.80 Kg

Software

OS Compatibility	Android 12.0 or newer
Visualization	Time graph, Contour Grid plot (2D), Surface plot (3D)
Maps, Charts	Unlimited
Measurement Points	Unlimited
Storage	Internal database (128GB)
Interface Languages	English, Greek
Additional Features	Automatic signal detection SNR measurement Extensive Signal Information Easy Backup and Database Recovery Tools Map data export to CSV, JSON, Surfer DAT Graph data export to CSV, JSON PNG screenshots Software update checking Over-the-air firmware updates



WHY CHOOSE US

Here are some standout reasons why AtomicX PPM leads the field:

- ✓ INSTANT RESULTS WITH REAL-TIME VISUALIZATION
- ✓ EASY TO USE
- ✓ TOUCH-DRIVEN OPERATION
- ✓ NO NEED FOR TUNING
- ✓ NO NEED FOR SENSOR ALIGNMENT
- ✓ UNLIMITED DATA STORAGE CAPABILITIES
- ✓ LIGHTWEIGHT
- ✓ HIGHLY RELIABLE CONSTRUCTION
- ✓ GREAT BATTERY LIFE

