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 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!

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!



info@atomicx

e-mail: atomicx.gr



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:

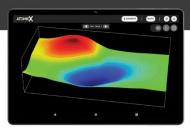
Search mode, where the user walks while scanning for anomalies. **Mapping mode**, where measurements are taken on a predefined grid to produce detailed 2D magnetic maps.

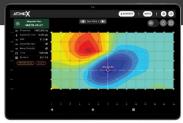
The system includes a **high-sensitivity sensor**, a rugged electronics unit, a **long-lasting lithium-polymer battery**, and an Android tablet running the AtomicX software. The wireless, touch-based interface enables **real-time data visualization** in **graph**, **2D** map, or **3D** surface formats. 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

ype 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

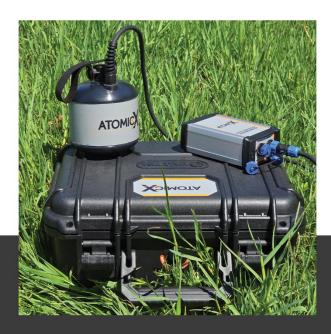
Easy Backup and Database Recovery Tools Map data export to CSV, JSON, Surfer DAT

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:

- VISUALIZATION VITH REAL-TIME
- EASY TO USE
- ▼ TOUCH-DRIVEN OPERATION
- ✓ NO NEED FOR TUNING
- ✓ NO NEED FOR SENSOR ALIGNMENT
- UNLIMITED DATA STORAGE CAPABILITIES
- LIGHTWEIGHT
- HIGHLY RELIABLE CONSTRUCTION