

ATOMICX PROTON PRECESSION MAGNETOMETER PRO EDITION

AtomicX PPM Pro Edition is a professional proton precession magnetometer engineered for **reliable** data, **fast** execution, and operational **flexibility** in all field conditions. It combines an innovative high-sensitivity 0.1 nT toroidal sensor, solid-state electronics, and advanced signal processing to deliver stable magnetic measurements with excellent reliability across varied environments. Unlike conventional PPM instruments that require time consuming setup and constrain freedom of movement in the field, AtomicX PPM is designed for immediate deployment: **no location-specific coil tuning** and **no strict sensor alignment** are required before starting a survey. This reduces preparation time and keeps users focused on acquisition quality and productivity.

AtomicX PPM Pro is designed to support many styles of operation and workflows. In **Tablet Mode**, users can control the instrument wirelessly and monitor results in real time, with live data visualization in graph, 2D contour map, and 3D surface formats. Data storage is practically unlimited with **high-capacity 128GB storage**, enabling long surveys without interruptions. The AtomicX software offers many filtering and visualization tools, so you can monitor results directly in the field, while quality metrics such as signal strength and SNR help operators assess measurement integrity as they work. The result is faster interpretation, fewer repeat passes, and stronger confidence in the captured data.

For missions where mobility and reduced carry weight are critical, the Pro Edition supports **Instrument-Only Mode** through its integrated display and buttons, allowing users to operate without the tablet when a lighter and more compact configuration is preferred. The embedded display presents live measurement data directly on the instrument, including magnetic field values in nT, signal quality metrics, and GPS status, giving operators immediate feedback during acquisition.

The Pro Edition further expands capability with **high-accuracy GNSS** support, enabling georeferenced magnetic readings at every data point for precise spatial mapping and improved downstream analysis.

In addition, the easily configurable **Base Station Mode** allows the instrument to run unsupervised in a stable stationary setup using the included tripod, producing continuous reference readings for advanced survey strategies, correction workflows, or other project-specific monitoring requirements.

There is also export compatibility with CSV, JSON, and Surfer DAT simplifies integration with existing processing pipelines and reporting tools.



AtomicX PPM Pro Edition is our complete professional solution.

Whether used for archaeology, engineering, geophysical mapping, UXO detection or other applications, AtomicX PPM Pro Edition provides unmatched sensitivity, high performance, autonomy, and practical usability, with groundbreaking real-time data processing and zero-tuning functionality — *redefining what's possible in magnetic field surveys.*



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PRO EDITION

FEATURES AND BENEFITS



High-Sensitivity & High Performance

0.1 nT toroidal sensor architecture delivers stable and reliable readings for demanding professional surveys.

Modular Accessory Ecosystem

The rod, tripod, and vest are easily assembled from a shared set of interchangeable carbon-fiber components, allowing multiple field configurations.

High-Accuracy GNSS Georeferencing

Attach the GPS module to any Accessory and record precise coordinates at every measurement point.

Dual Operating Modes

Work in full Tablet Mode for maximum visualization and wireless control, or switch to Instrument-Only Mode when you need a lighter setup.

Real-Time Visualization in the Field

View measurements instantly as time graph or 2D map while surveying, not after returning to the office.

Live Data Quality Control

Monitor signal quality and SNR in real time to identify weak or noisy readings before they affect final results.

Configurable Base Station Mode

Run the instrument in a fixed tripod position to collect continuous reference data for corrections, monitoring, and advanced workflows.

Tuning-Free Deployment

No location-specific coil tuning required, enabling faster startup and smoother operations across different environments.

Orientation-Independent Sensor

No strict sensor alignment needed, giving operators more freedom of movement in every terrain.

Open Export Compatibility

Export to CSV, JSON, and Surfer DAT for easy integration with existing processing, interpretation, and reporting pipelines.



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MODULAR ACCESSORY ECOSYSTEM

The AtomicX modular accessory system consists of the following:

1. Lightweight carbon fiber tubes (X4)
2. Removable extension feet
3. Tripod mounting bracket
4. AtomicX Vest
5. Removable telescopic carbon fiber tubes



TRIPOD



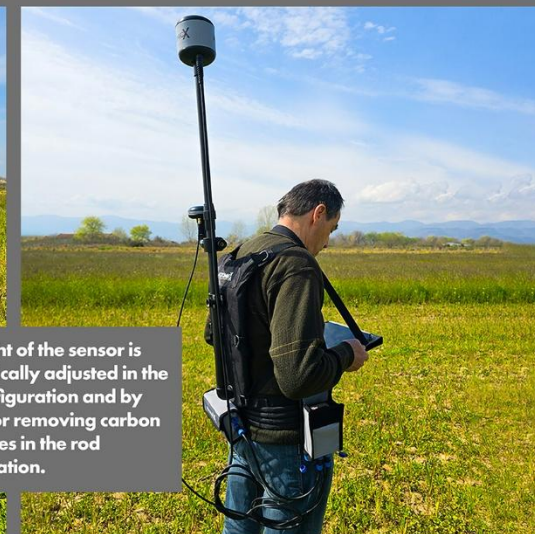
The rod, tripod and vest are easily assembled from the same interchangeable carbon-fiber components!

ROD



The height of the sensor is telescopically adjusted in the vest configuration and by adding or removing carbon fiber tubes in the rod configuration.

VEST



The GPS Antenna includes a long 2.5m cable and a special mounting bracket, that allows it to be attached to any of the three accessories.

For example on the rod and vest for rover surveys and on the tripod for precise location of a base station capture.

All components for advanced mapping, including the accessories, main unit, tablet and batteries, are packed into two rugged transport cases, with total weight not exceeding 8 kg.



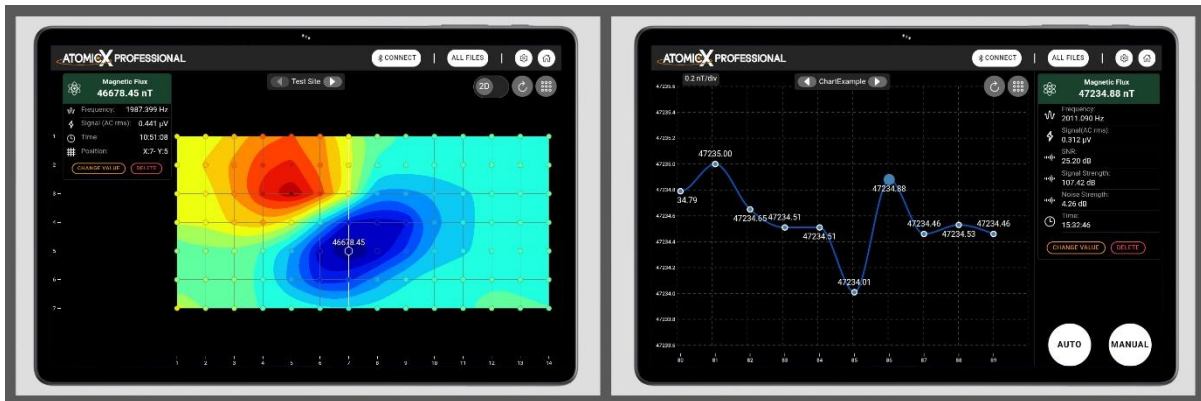
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ATOMICX SOFTWARE

TABLET MODE

The AtomicX Software transforms field acquisition into a real-time workflow, giving operators immediate access to time graphs and 2D contour maps as data is collected. Running wirelessly on an Android tablet or smartphone via Bluetooth, it combines live visualization, advanced filtering, 3D surface views, remote control of key instrument settings, and an intuitive maps and charts management system in one interface. Built-in backup tools, high-capacity storage, and export support for CSV, JSON, and Surfer DAT make it easy to move from acquisition to analysis with reliability and without the need for external data loggers or other time-consuming practices.



INSTRUMENT ONLY MODE

For lighter and more autonomous operation, AtomicX PPM Pro can be fully controlled directly from the instrument through its integrated display and easy to use three-button interface. This minimal, field-focused mode allows users to create complete surveys, capture single readings manually, or run automatic interval measurements, while also viewing GPS coordinates, signal quality metrics, settings, and onboard storage status in real time. Readings stored on the instrument can then be transferred wirelessly to the AtomicX tablet application within seconds, where they become immediately available for review, processing, and export in all supported formats.



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PRO EDITION

TECH SPECS

GENERAL SPECS

Type	Proton Precession (EFNMR) Magnetometer
Operating Range	20000 – 100000 nT
Sensor Sensitivity	0.1 nT
Maximum Field Gradient	1200 nT/m
Absolute Accuracy	±0.25 nT
Resolution	0.01 nT
Sensor Polarization	1 – 5 seconds (User-configurable)
Measurement Cycle	1 – 120 seconds (User-configurable)

HARDWARE SPECS

Switching	Solid-state
Coil Tuning	Not required (<i>Global Tuning-Free Technology</i>)
Connectivity	Bluetooth LE 5.0
Battery Life	8 hours of continuous measurements 55 hours standby
Battery Type	External Li-Poly 14.8V, 5000mAh
Dimensions	Toroidal Sensor: 10.6cm x 10.2cm (D x H) Main Unit: 10.6cm x 5.2cm x 15cm (W x H x D)
Weight	Toroidal Sensor: 1.20 Kg Main Unit: 0.85 Kg
Total Packed System Weight	<8 kg (with accessories, transport cases & all included components)

SOFTWARE SPECS

OS Compatibility	Android 12.0 or newer
Visualization	Time graph Contour Grid plot (2D) Surface plot (3D)
Maps, Charts	Unlimited
Measurement Points Per Map	Unlimited
Storage	Tablet: Internal database – 128GB Main Unit: Internal database – 12MB
Interface Languages	English, French, German, Greek, Turkish
Additional Features	Base Station Mode 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

GNSS SPECS

Antenna	External GNSS antenna (2.5 m cable)
Supported Constellations	GPS / QZSS, Galileo, GLONASS, BeiDou
Positioning Mode	Point-by-point georeferencing for survey measurements
Horizontal Accuracy	1.5 m
Time-To-First-Fix	24 sec
Max Altitude	80000 m



ACCESSORIES SPECS

Material	Carbon-fiber & plastic
Configurations	Rod, Tripod, Vest
GPS Mounting	Compatible with all three configurations
Height Adjustment	Vest: up to 1 m (telescopic) Rod: up to 2m (modular) Tripod: up to 1.5m (modular)

HOW TO BUY

FOR INTERNATIONAL ORDERS

info@atomicx.gr

FOR CUSTOMERS IN FRANCE:

<https://georeva.eu/fr/contact>

FOR CUSTOMERS IN INDIA:

kc@magtrans.in

