

**ELVATECH** PRECISION THAT  
EMPOWERS CONFIDENCE

# PROSPECTOR 3 MAX



**FLAGSHIP HANDHELD XRF ANALYZER FOR  
THE MOST DEMANDING APPLICATIONS**

# THE PROSPECTOR 3 MAX IS THE ULTIMATE HANDHELD XRF ANALYZER DESIGNED FOR THE MOST COMPLEX ANALYTICAL CHALLENGES

Perfectly suited for demanding applications in industry, scientific research, pharmaceuticals, and high-tech production, ProSpector 3 Max provides exceptional accuracy and versatility, capable of analyzing a full range of elements, from sodium (Na) upwards.

## MAXIMUM SENSITIVITY

Equipped with a powerful 50 kV rhodium-anode X-ray tube and helium purge capability, ProSpector 3 Max detects the lightest elements and trace concentrations with unmatched accuracy—delivering reliable, repeatable results for critical analyses.

## ULTIMATE FLEXIBILITY

Automatic 8-position filter changer combined with a dual-position collimator offers instant adaptation for any sample type, significantly reducing measurement noise and enhancing precision across complex and diverse materials.

## ROBUST DESIGN

Compact and rugged construction (178 × 88 × 40 mm; 1.16 kg) with IP67 (with silicon cover) dust- and waterproof rating ensures dependable operation in harsh environmental and industrial conditions, allowing users to focus on analysis rather than equipment care.

## INTELLIGENT INTERFACE

The intuitive software combined with a macro and micro-view CCD cameras simplifies workflows, provides clear visual feedback, and reduces operator training time, enabling rapid onboarding and efficient daily operations.



**TWICE**  
better precision

**TWICE**  
lower detection limits

**FOUR TIMES**  
faster than other handheld XRF



## WIDE DETECTION RANGE

Accurately analyzes elements from Na through U, covering both light and heavy elements in a single run.

## HIGH-QUALITY IMAGING

Integrated CCD camera with sample-view and macro-view modes provides detailed visual inspection before and after measurement, enhancing precision and ease of use.

## AUTOMATIC FILTER&COLLIMATOR

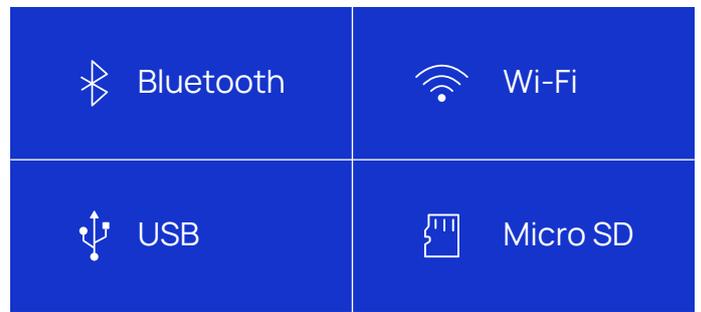
Eight-position filter and dual-position collimator switch on demand for optimal signal-to-noise across diverse materials.

## ERGONOMIC LAB STAND

The unique design of the folding display allows you to work comfortably in the lab stand without the need for an external PC.



Cements	
Today, 11:43 AM 1886	
LOI:	1.560 ± 0%
CaO:	68.16 ± 0.16%
SiO <sub>2</sub> :	21.54 ± 0.20%
Al <sub>2</sub> O <sub>3</sub> :	3.83 ± 0.23%
SO <sub>3</sub> :	2.77 ± 0.03%
MgO:	1.67 ± 0.23%
Fe <sub>2</sub> O <sub>3</sub> :	0.149 ± 0.005%
P <sub>2</sub> O <sub>5</sub> :	0.11 ± 0.05%
TiO <sub>2</sub> :	0.09 ± 0.03%
K <sub>2</sub> O:	0.08 ± 0.04%
SrO:	0.031 ± 0.001%
Mn <sub>2</sub> O <sub>3</sub> :	0.011 ± 0.006%
ZnO:	0.002 ± 0.001%



## TYPICAL APPLICATIONS



Complex Alloy Analysis in Metallurgy



Mineral and Ore Analysis in Geology



Quality Control for Construction Materials



Electronics Component and Solder Testing



Precious Metals and Advanced Jewelry Inspection



Detection of heavy metals and pollutants in water, soil, and air

## REAL-WORLD EXAMPLE



In a laboratory conducting rare-earth element research, ProSpector 3 Max quickly and accurately analyzes complex samples, delivering precise elemental composition even at trace concentrations. Its helium purge capability enhances detection of the lightest elements, ensuring fast, accurate results and improving overall research efficiency.

## TECHNICAL SPECIFICATIONS

X-ray Tube: Rhodium anode, 50 kV

Detector: Large-area Silicon Drift Detector (SDD)

Filters & Collimator: 8-position automatic filter changer; 2-position collimator

Detector Window: 1 µm Graphene

Detection Range: Na – U

CCD Camera: Sample-view; macro-view

Dimensions & Weight: 178 × 88 × 40 mm; 1.16 kg

Ingress Protection: IP67 dust- and waterproof (with silicone cover)

Connectivity: Bluetooth & Wi-Fi; GPS

Environmental Correction: Temperature & barometric

Helium Purge: Option, for optimal light element detection

Choose ProSpector 3 Max for unmatched sensitivity, ultimate versatility, and accurate XRF analysis tailored for complex analytical tasks in diverse environments.



Speed



Lightness



Accuracy



Stability

Elvatech Ltd. 50, Mashynobudivna str., Kyiv, 03067, Ukraine

Phone: (+1929) 243 99 06, (+38 063) 576 21 21, (+38 095) 576 21 21,

E-mail: [office@elvatech.com](mailto:office@elvatech.com)

[www.elvatech.com](http://www.elvatech.com)

