

## TECHNICAL SPECIFICATIONS

DETECTOR: HIGH-SENSITIVITY SDD

ELEMENT RANGE: NA (Z=11) TO U (Z=92)

DETECTION LIMIT: FROM 10 PPM

ENERGY RESOLUTION:  $\leq 140$  EV

POWER: BUILT-IN BATTERY, UP TO 16 HOURS OF OPERATION

WEIGHT: 1.05 KG (WITH BATTERY)

DIMENSIONS: 236×193×68 MM

INTERFACES: BLUETOOTH, WI-FI, USB

PROTECTION: IP67



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# PROSPECTOR 3 ADVANCED

## XRF ANALYZER

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# ELVAX PROSPECTOR 3 ADVANCED

Next-generation handheld XRF analyzer, offering industry-leading accuracy and speed in the market's most compact form factor.

It supports a wide elemental range (Na to U) with specialized algorithms for **Precious Metals**, Soils, Plastics, Alloys & PMI, Geochemistry, Regulatory, Industrial, Gemology, etc.

## KEY ADVANTAGES

### ULTIMATE PERFORMANCE:

World's fastest analyzer (500,000+ cps) – twice as fast as competitors, ensuring maximum precision and calibration stability.

### COMPACT & RUGGED:

The smallest (1.05 kg) and lightest XRF gun available; IP-67 rated for operation in harsh environments or even underwater.

### MOBILITY & CONVENIENCE:

Up to 16 hour battery life with hot-swap support, a folding display for lab stand use, and dual macro/micro CCD cameras.

### ADVANCED FUNCTIONALITY:

Automatic collimator changer for small spot analysis (jewelry, welds), integrated barcode scanner, and full ElvaX™ software compatibility.

### RELIABILITY & SAFETY:

Protective detector shield (Be-window), proximity sensor for radiation safety, and a 36-month warranty.

**SEAMLESS CONNECTIVITY:** Direct data transfer via USB, WiFi, Bluetooth, or MicroSD card.



## NEW CALIBRATION

UNLIKE TRADITIONAL XRF APPLICATIONS, **GEMSTONE CALIBRATION FROM US METALS** ALLOWS:

- Identification of gemstone type;
- Know if a gemstone is natural or synthetic;
- Non-destructive testing of faceted or mounted stones;
- Quantitative assessment of major and trace elements.



Gem		99%
Ruby (98% match)		
Al <sub>2</sub> O <sub>3</sub> :	98.72 ± 0.10%	
Cr <sub>2</sub> O <sub>3</sub> :	0.73 ± 0.07%	
P <sub>2</sub> O <sub>5</sub> :	0.36 ± 0.14%	
Fe <sub>2</sub> O <sub>3</sub> :	0.06 ± 0.02%	
SnO <sub>2</sub> :	0.05 ± 0.04%	
Sb <sub>2</sub> O <sub>3</sub> :	0.03 ± 0.06%	
GaO <sub>3</sub> :	0.02 ± 0.00%	
CdO:	0.02 ± 0.02%	

