

TECHNICAL SPECIFICATIONS

Detector: High-sensitivity SDD

Element Range: S (Z=16) to U (Z=92)

Detection Limit: From 10 ppm

Energy Resolution: ≤ 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: IP65

PS 3 is your professional choice for rapid, precise, and non-destructive analysis of precious metal alloys. Optimize your assay, valuation, and quality control workflows, and ensure high reputation and client trust with this advanced XRF solution.



Speed



Lightness



Accuracy



Stability

O: 855.9.REFINE (855.973.3463)

E: sales@usmetalsusa.com

US Metals, LLC

Las Vegas, NV 89102

www.usmetalsusa.com



ELVATECH PRECISION THAT EMPOWERS CONFIDENCE

PROSPECTOR 3



PORTABLE XRF ANALYZER FOR JEWELRY

A RELIABLE TOOL IN JEWELRY ANALYSIS

PS 3 is a lightweight, compact handheld X-ray fluorescence analyzer designed for quick and accurate composition measurements of precious metal alloys and jewelry on the spot: in a jewelry workshop, pawn shop, or during antique appraisal.

KEY BENEFITS OF PS 3 FOR JEWELERS AND PAWN SHOPS

- ✓ **Results in Percentages and Carats:** Instant conversion of alloy composition into familiar units (% purity, carats) for easy evaluation.
- ✓ **Built-In CCD Camera with Illumination:** Visual monitoring and precise focusing on the analysis area.
- ✓ **Fixed Collimator:** Selects the optimal beam for analyzing small details and gemstone inlays.
- ✓ **Coating Recognition:** Automatic detection of gold plating, rhodium, and other surface treatments.
- ✓ **4.3" Touchscreen Display:** Intuitive menu and quick access to results.
- ✓ **Standalone Bench-Stand Operation:** Runs in a lab mount without the need for an external PC—ideal for extended measurements and enhanced accuracy.
- ✓ **Non-Destructive Rapid Test:** Analysis in 3–5 seconds without cutting or sampling the piece.
- ✓ **Accurate Alloy Identification:** Measures Au, Ag, Pt, Pd and alloying elements (Cu, Ni, Zn, etc.) with precision better than 0.1‰.
- ✓ **Compactness and Durability:** Weight ~1 kg, IP65 rating—reliable in any condition.
- ✓ **Extended Operation Time:** Up to 16 hours of autonomous use with hot-swap battery replacement.



www.elvatech.com

APPLICATION SCENARIOS

ON-SITE ASSAY VERIFICATION

Quickly confirm the fineness of a piece without sending it to an external laboratory.

COUNTERFEIT PREVENTION

Identify non-standard alloys and masking coatings.

SCRAP INTAKE ANALYSIS

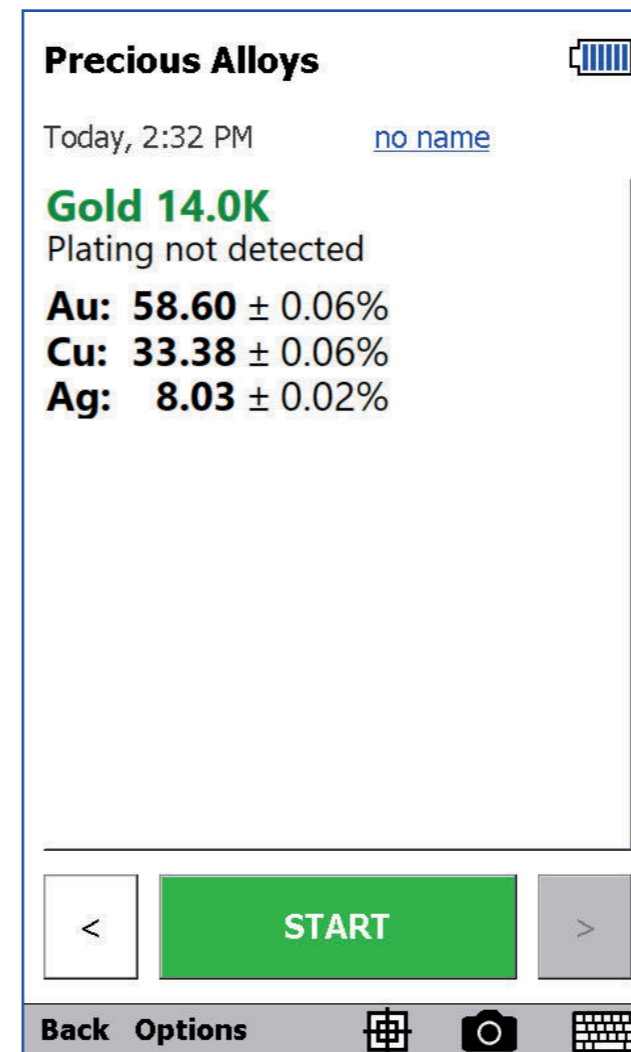
Analyze batches of gold and silver scrap upon receipt.

PLATING THICKNESS MEASUREMENT

Check the thickness of rhodium or gold plating on jewelry and accessories.

QUALITY ASSURANCE

Provide clients with an official report on metal composition and purity.



www.elvatech.com