



# Elvatech

Advanced XRF equipment and solutions



**ANALYTICAL POWER  
OF A FULL-BLOWN LAB  
IN YOUR HAND**

**PROSPECTOR 3**

ProSpector 3 is the next-generation hand-held X-ray fluorescence analyzer. It offers a new level of analysis accuracy, speed and detection limits. ProSpector 3 is the smallest and lightest hand-held XRF on the market with an intuitive and user-friendly software interface.



### **PRODUCTIVITY**

Highest accuracy within the shortest measurement time, excellent precision

### **STABILITY**

Excellent calibration stability, compensation of influence of ambient temperature and pressure variations

### **MOBILITY**

Small (236 x 193 x 68 mm), and light (1.05 kg) handheld analyzer.

### **RELIABILITY**

Dustproof and waterproof instrument body, with IP-67 protection level.

### **FUNCTIONALITY**

Two CCD cameras for macro- and micro- view combined with an automatic collimator

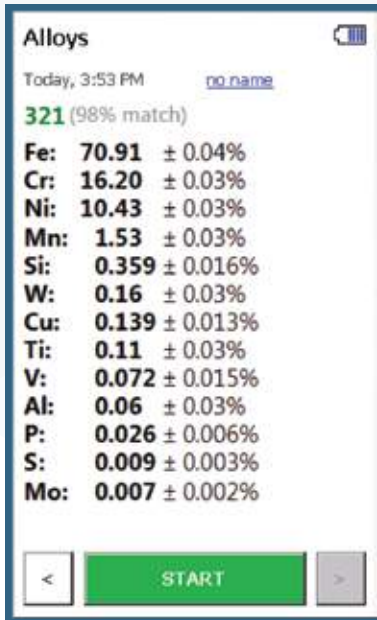
 Bluetooth

 Wi-Fi

 USB

 Micro SD

**All interfaced to quick data exchange**



ProSpector 3 has the largest touch screen (4.3") available in hand-held XRF analyzers

Image autorotation lets you operate the analyzer both in the horizontal and vertical position.

The unique design of the folding display allows for convenient operation in the lab stand with no need to use an external PC.



ProSpector 3 is available in two bright colors, so they never get lost during Your operations.

# 500 000 cps

World's fastest XRF analyzer (more than twice as fast as any other handheld XRF) – highest accuracy within the shortest measurement time, excellent precision



## APPLICATIONS

Positive material identification and scrap sorting

Alloy analysis

Ferroalloys

Jewelry and precious metals analysis

Mining and geology

Automotive catalytic converters

RoHS, WEEE, ELV, Proposition 65 Compliance testing

Construction materials and minerals

Refractory materials

Environmental testing of soils and sediments, water, paints and forensic materials

Coating thickness

**Custom applications are available upon request**

## Specs

### Digital X-Ray Source digiX-50

Anode: Rh, W  
Voltage: 50 kV  
Current: 200 uAmp  
Power: 5 W  
8 positions filter changer  
2 position collimator changer

### X-Ray Detector

Type: SDD  
Area: 10, 30, or 40 mm<sup>2</sup>  
Energy resolution: <140 eV @ 5.9 keV  
Count rate: 500,000 cps

### Electronics

DPP: proprietary DAS (Dynamically Adaptive Shaping) type, 80 MHz sampling rate  
MCA: 4096 channels  
Display: 4.3"  
Connectivity: USB, Bluetooth, Wi-Fi  
2 high-resolution video cameras

### General

Dimensions: 236 x 193 x 68 mm  
Weight: 0.82 kg, 1.05 with battery kg  
Protection: IP67

### Software

Operating system: Windows EC7  
Analysis algorithms: Fundamental parameters (FPA), Empirical (regression) calibrations

## ProSpector 3 models

	ProSpector 3	ProSpector 3 Advanced	ProSpector 3 Max
X-Ray Tube	W, 40 kV (option 50 kV)	Rh, 40 kV (option 50 kV)	Rh, 50 kV
Primary Filters	Single	automatic 8-position changer	automatic 8-position changer
Collimators	Single	automatic 2-position changer	automatic 2-position changer
X-Ray Detector	SDD (option – large area Fast SDD)	Large area Fast SDD	Extra large area Fast SDD with graphene window
Detector Window	Be, 12 um	Be, 8 um	Grafene, 1 um
Detection Range	S – U	Mg – U	Mg – U (Na – U)
CCD Camera	Sample view (option)	Sample view (option – macro view)	Sample view, macro view
Temperature correction	Yes	Yes	Yes
Barometric correction	No	Yes	Yes
Bluetooth	Option	Option	Yes
Wi-Fi	Option	Option	Yes
GPS	No	Option	Yes
Ingress Protection	IP65	IP65	IP67
He purge	No	No	Option

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