



# Elvatech

Advanced XRF equipment and solutions



**DESIGNED FOR  
HIGH-ACCURACY  
ANALYSIS OF  
PRECIOUS METALS  
AND JEWELRY**

**ElvaX**  
*Jewelry Lab*

ElvaX Jewelry Lab is aimed on high-accuracy analysis of jewelry and precious metals. Measurement process only takes several seconds. The result is shown in both percent share and karats. ElvaX Jewelry Lab is also capable of detecting coatings and nonstandard alloys. This instrument can be operated either using the embedded computer with the high-resolution touchscreen display, or using a PC with ElvaX™ software installed.

## ACCURACY

Analysis accuracy of precious metals and jewelry is better than 0,1%

## SPEED

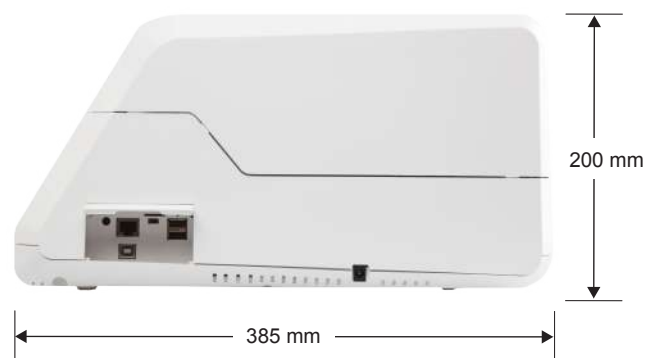
The whole measurement process takes just several seconds

## COMPLETENESS

Integrated computer, high-accuracy scales, printer and a rechargeable Li-ion battery

The integrated CCD camera makes it possible to target the required spot of the sample undergoing analysis.

Automatic collimator changer allows you to select the required measurement spot diameter.



- ✔ High speed and accuracy
- ✔ Intuitive interface
- ✔ Autonomous operation as well as connected to a PC
- ✔ Coatings detection
- ✔ Compact, doesn't take much space on a desk or a counter
- ✔ Leaded glass to keep analyzed items always in sight
- ✔ Customer display



## 14 KARATT GOLD ANALYSIS RESULTS

	Au	Ag	Cu
1	58.55	8.21	33.24
2	58.59	8.18	33.23
3	58.63	8.2	33.17
4	58.6	8.16	33.24
5	58.56	8.19	33.25
6	58.61	8.22	33.17
7	58.64	8.18	33.18
8	58.58	8.17	33.25
9	58.59	8.24	33.17
10	58.63	8.16	33.21
Average	58.6	8.19	33.21
Std. deviation	0.03	0.03	0.04

## **Digital X-Ray Source digiX-40**

Anode: W

Voltage: 40 kV

Current: 200 uAmp

Power: 4 W

5 position collimator changer from 1 to 10mm

## **X-Ray Detector**

Type: Fast SDD (optional Si-PIN)

Area: 25 mm<sup>2</sup> (6 mm<sup>2</sup> for Si-PIN)

Energy resolution: 140 eV (165 eV for Si-PIN) at Mn Ka

## **Electronics**

DPP: proprietary DAS (Dynamically Adaptive Shaping) type

MCA: 4096 channels

## **General**

Dimensions: 280 x 385 x 200 mm

Analytical chamber: 185 x 212 x 90 mm

Weight: 7 kg

Power supply: 90 – 240 V, 50/60 Hz

Power consumption: 40 W

Battery: 6 hours continuous operation

## **Software**

Operating system: Windows EC

Analysis algorithm: Fundamental parameters (FPA)

## **Connectivity**

Data transfer: 2 USB ports, Micro SD, Ethernet

Data input: Keyboard and mouse can be connected for data input

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