

ELVATECH PRECISION THAT
EMPOWERS CONFIDENCE

JEWELRY LAB



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

ELVAX JEWELRY LAB IS AIMED ON HIGH-ACCURACY ANALYSIS OF JEWELRY AND PRECIOUS METALS

Measurement process takes only a few 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

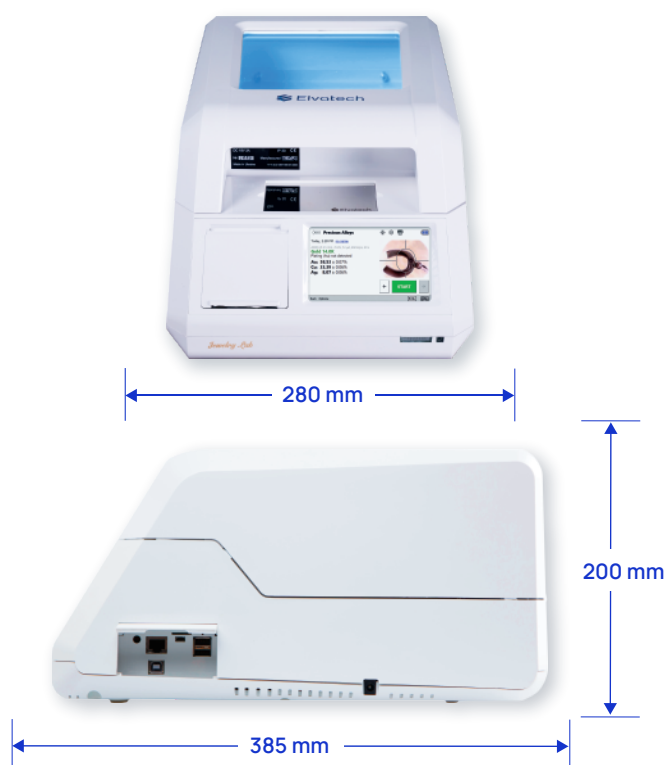
Analysis accuracy of precious metals and jewelry is better than 0,1%

SPEED

The whole measurement process takes only 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.

Precious Alloys

5/27/2013, 1:19 PM 585-7

14.0K Gold
Plating not detected
3.27 g

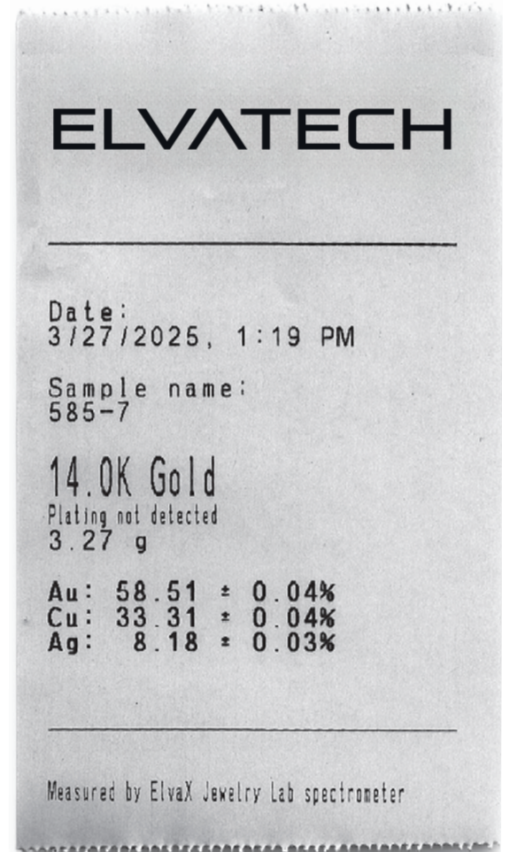
Au: 58.51 ± 0.04%
Cu: 33.31 ± 0.04%
Ag: 8.18 ± 0.03%



< **START** >

BENEFITS

- ✓ 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

GENERAL

Dimensions: 280 x 385 x 200mm

Analytical Chamber Dimensions: 185 mm x
212 mm x 90 mm

Weight: 7 kg

Power supply: 90 – 240 V, 50/60 Hz; optional
battery

Power consumption: 40 W

Battery: 6 hours continuous operation

EMBEDDED PC

Operating system: Windows EC

Analysis algorithms: Fundamental
parameters (FPA), Regression algorithm

Data transfer: 2xUSB, MicroSD, miniUSB,
Ethernet

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

Screen: 5", 800x480

ELECTRONICS

Signal processor: Digital pulse processor based on 80 MHz DSP

ADC: 4096 channels

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: CSA SSD (optional Si-PIN)

Area: 25 mm² (6 mm² for Si-PIN)

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

Count rate: 500 000 cps



Speed



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

www.elvatech.com

