



SciAps X-50 Alloy Specifications

The classic model for many applications at a great value.

- Premium X-ray hardware for reliable handling
- Optimal performance on precious metals like Au, Ag, Pt and Pd
- Fast, precise results

Get exactly what you need with the totally reengineered X-50. It's the highest performing XRF on the market that features a cost effective SDD detector. A little beefier than SciAps sleeker models, this cost-effective XRF still offers best-in-class analytical performance and speed for its detector platform, operating at rates 2X or higher than other brands. SciAps powerful, miniaturized X-ray tube combined with highly advanced internal geometry yields fast, precise results.



Reinventing a classic

The X-50 is great for basic analysis of transition and heavy metals. For those who don't need to measure Mg, Al, Si, S, or P, it's the perfect choice. We've reengineered the classic detector technology with a new internal circuit board, new housing and metal components, up-to-date software and user interface, and full recalibration. And we've equipped it with more features, such as a built-in, high-resolution camera for sample viewing and a macro-camera for photo-documentation or 2D/3D barcode reading and storage.

Standard element package

The X-50 operates using the same advanced X-ray tube technology as other SciAps X-Series models (operating at 40 kV max) for testing, that includes Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, W, Ta, Hf, Re, Se, Au, Pb, Bi, Zr, Mo, Pd, Ag, Cd, Sn, and Sb. More elements can be added upon request.

64% 12:15 PM			
#10 316 100			
V	0.115%	± 0.021	0.00
Cr	17.05%	± 0.145	16.0
Mn	1.43%	± 0.078	0.00
Fe	68.18%	± 0.320	60.2
Ni	10.81%	± 0.157	10.0
Cu	0.356%	± 0.033	0.00

Full sample chemistry displayed.

For more information, or to schedule a demonstration:

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SciAps



Android and data management

Operates on Android OS with the feel of a smartphone. Using Bluetooth, Wi-Fi and USB, users can print, email, and connect to virtually any information system for real-time data. On-board macro camera allows for photo-documentation, and Bluetooth label printer provides instant hard copy labels.

Use SciAps Test Station to analyze small pieces in benchtop mode. Features an interlocking lid for your protection and super stable base to keep samples positioned correctly.



A classic model for many applications at a great value.

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Weight	3.1 lbs. (1.40kg) with battery
Dimensions	9.38in (238mm) x 11.15in (283mm) x 3.34in (84mm)
Excitation Source	4 W, 40kv Rh or W on alloys 50kv Au on other apps.
Detector	7 mm ² SDD, silicon drift detector, (active area), 170 eV resolution FWHM at 5.95 Mn K-alpha line.
Available Apps	Alloy analysis, Precious Metals, Soil, Mining, Car Cats. New apps are added regularly, please check with company or website.
X-ray Filtering	Single primary beam filter for alloy, mining, precious metals. Multiple filters for soil, RoHS, car catalysts and some other apps.
Environmental Temperature Range	10F to 130F at 25% (-12.2C to 54.44C) duty cycle
Analytical Range	24 elements standard, specific elements vary by app. Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, W, Ta, Hf, Re, Se, Au, Pb, Bi, Zr, Mo, Pd, Ag, Cd, Sn, and Sb. Additional elements may be added upon user request. Precious Metals app is 23 elements standard.
Processing Electronics and Host Processing	1.2 GHz quad ARM Cortex A53 64/32-bit; RAM: 2 GB LP-DDR3; Storage: 16 GB eMMC (storage).
Pulse Processor	12 bit with digitization rate of 80 MSPS 8K channel MCA USB 2.0 for high-speed data transfer to host processor. Digital filtering implemented in FPGA for high throughput pulse processing, 20 nS - 24 μ s peaking time.
Power	On-board rechargeable Li-ion battery, rechargeable inside device or with external charger, AC power, hot-swap capability (60 s max swap time).
Display	3.5-inch(88.9mm) color capacitive touchscreen – 400 MHz Qualcomm Adreno 306 2D/3D graphics accelerator
Sample Viewing	Internal camera for viewing sample before and during analysis for proper sample alignment. Second macro-camera for scanning QR or barcodes and for photo-documentation and report generation.
Comms/Data Transfer	Wi-Fi, Bluetooth, USB connectivity to most devices, including SciAps Profile Builder PC software.
Calibration	Fundamental parameters.
Calibration Check	External 316 stainless check standard for calibration verification and energy scale validation.
Security	Password protected usage (user level) and internal settings (admin).
Dual Cameras	Internal high-resolution camera for sample viewing, welds, etc. Macrocamera for photo documentation, reading and storing 2D/3D barcodes and QR codes.
Regulatory	CE, RoHS, USFDA registered, Canada RED Act.

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