

# SciAps X-550 For GEOCHEM Specifications



## Simply the best handheld XRF ever made

Perfect for long days in the field, the SciAps X-550 sets a new performance standard for handheld XRF. It's the lightest, fastest, most articulate X-ray gun ever made — 2.8 lbs. including battery — and delivers the small size, blazing speed and high precision of the SciAps X Series in a perfectly balanced device. The X-550 also features a powerful, miniaturized X-ray tube designed to excel at measuring low atomic number elements Si, P, S, Mg and Al. Need optimal performance on rare earth elements or gold pathfinders like Ag or Sb? The X-550 has an optional 50 kV Mining calibration for even better LODs on these heavier elements. This X-ray tube combined with highly optimal internal geometry yields fast, precise results even on the hardest elements to measure with handheld XRF. Low weight, with fast testing means you can use the analyzer all day long while minimizing fatigue and processing more samples than ever before.

#### Premium X-ray hardware for fast, precise results

Optimal performance on light elements like Mg, Al, Si, P, S

Powerful 50 kV X-ray tube to measure rare earth elements or key gold pathfinder elements Sb, Ag



### Connectivity and Android

The X Series is built on Google's Android platform for

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Fe <sub>2</sub> O <sub>3</sub>	12.71%	0.070%
TiO <sub>2</sub>	2.54%	0.050%
Al <sub>2</sub> O <sub>3</sub>	2.04%	0.073%
Р	0.984%	0.027%
Ca	0.374%	0.014%
SiO <sub>2</sub>	0.697%	0.025%

real-time data exporting. The user interface has the feel of a smartphone with results easily viewed on a vibrant display and reversible light/dark for all lighting conditions. Built-in **Wifi**, **Bluetooth and GPS-capable** mean that users can print and email from the X and connect to virtually any information management system for efficient test data and reporting.

#### Interested Handheld Micro Analysis?

Check out our Z-300, the only handheld LIBS analyzer in the world designed for Geochemical analysis. With a laser spot size of 100 um, the Z-300 makes it easy to analyze the geochemistry of specific minerals, veins or inclusions in the field or in the lab.

Need to analyze elements lighter than Mg? The Z-300 lets you measure ultra light elements like Li, C, B and Be in just a couple of seconds.

Packaged together with shared accessories in the One Box, the X-550 and Z-300 provide optimal performance for virtually every element, anywhere on the planet for a fraction of the cost of lab testing.





# SciAps X-550 Handheld XRF Specifications

Ultra Fast, Precise X-ray Fluorescence Analyzer

Weight	2.8 lbs. with battery
Dimensions	7.25" x 10.5" x 4.5"
Excitation Source	40 kV, 200 uA Rh anode and 10kV, 500 uA for alloy testing, 50 kV, 200 uA Rh or Au anode for most other apps
Detector	20 mm <sup>2</sup> silicon drift detector (active area), 140 eV resolution FWHM at 5.95 Mn K-alpha line
Available Apps	Alloy, Mining apps. New apps are added regularly, please check with company or website.
X-ray Filtering	4 position filter wheel for beam optimization
Environmental Temperature Range	10F to 130F at 25% duty cycle
Analytical Range	32 elements standard, specific elements vary by app. Additional elements may be added upon user request. Precious metals app is 22 elements standard.
Processing Electronics and Host Processing	1.2GHz Quad ARM Cortex A53 64/32-bit, RAM 2GB LP-DDR3, Storage: 16 GB eMMC (storage)
Pulse Processor	12 bit with digitization rate of 80 MSPS 8K channel MCA USB 2.0 for highspeed data transfer to host processor. Digital filtering implemented in FPGA for high throughput pulse processing 20 nS - 24 uS 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	2.7-inch color capacitive touchscreen — 400 MHz Qualcomm Adreno 306 2D/3D graphics accelerator
Comms/Data Transfer	Wifi, Bluetooth, USB connectivity to most devices, including SciAps Profile Builder PC software
Calibration	Fundamental parameters. For Geochem and Environmental Soil apps, users may also choose "Compton Normalization" method and/or use empirically derived calibrations.
Calibration Check	External 316 stainless check standard for calibration verification and energy scale validation.
Grade Library	Standard library contains 500+ grades, no practical size limit. Multiple libraries supported, grades may be added on analyzer or via PC software package (ProfileBuilder)
Security	Password protected usage (user level) and internal settings (admin)
Regulatory	CE, RoHS, USFDA registered, Canada RED Act
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For more information, or to schedule a demonstration:

www.sciaps.com 339.927.9455

