

With its compact size, lightning-fast speed, and unmatched precision, the X-550 is the perfect tool for NDT and PMI users who need to access difficult-to-reach test locations and welds. Featuring a powerful, miniaturized X-ray tube, this device excels at measuring low atomic number elements such as Si, P, S, Mg, and Al. With its highly optimized internal geometry, the X-550 provides fast and precise results for challenging applications like measuring silicon for sulfidic corrosion and low magnesium in aluminum alloys.

FEATURES

- Premium X-ray hardware for fast, precise results
- Optimal performance on light elements like Mg, Al, Si, P, S
- Optimized for Sulfidic Corrosion (low SI)
- Powerful 50 kV X-ray tube to measure rare earth elements or key gold pathfinder elements Sb, Ag
- Wifi, Bluetooth and GPS capable
- Field ready, rugged case

Mining

SciAps XRF analyzers are utilized worldwide by many major exploration companies & mining laboratory services companies. Available with compact test stand for closed-beam operation.

Soil

Can be equipped with apps for elemental analysis of environmental soils. The analysis package includes the 8 RCRA metals & 11 of the 12 EPA priority pollutant metals.

Alloys

Optimized for low detection limits on common tramp elements, including Cr, Ni, Cu, V, Nb, Mo in steels, Pb and Bi in nickel alloys, and various undesired elements in copper alloys.

Precious Metals

Provides fast, precise chemistry on the wide array of high temperature alloys, stainless, red metals and precious metals.



UI has the feel of a smartphone,
built on Google Android platform

12:31 AM		
< 12: Mining		
	Fe ₂ O ₃	12.71% 0.070%
	TiO ₂	2.54% 0.050%
	Al ₂ O ₃	2.04% 0.073%
	P	0.984% 0.027%
	Ca	0.374% 0.014%
	SiO ₂	0.697% 0.025%

CALL GEOTECH TODAY

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Geotech Environmental Equipment, Inc.

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Technical Specifications

Weight	2.98 lbs. with battery
Dimensions	7.25" x 10.5" x 4.5"
Excitation Source	5W X-ray tube. 40 kV, 200 uA Rh anode 10kV, 500 uA for alloy testing 50 kV, 200 uA Au anode for most other apps
Detector	20 mm ² 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 positions filter wheel for beam optimization
Environmental Temperature Range	10°F to 130°F 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 & Host Processing	1.2GHz Quad ARM Cortex A53 64/32-bit, RAM 2GB LP-DDR3 Storage: 16 GB eMMC
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
Data Transfer	Wifi, Bluetooth, USB connectivity to most devices, including SciAps ProfileBuilder 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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