

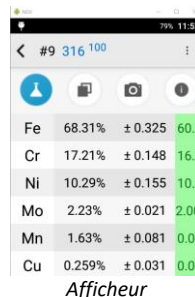
XRF Portable Analyzer X-50 SciAps : Technical Specifications



Camera



Case



Afficheur

Weight	3.3 lbs. (1,5 Kg), complete and in working order with battery
Dimensions	7.25" x 10.5" x 4.5" (18.5 cm x 14 cm x 10.3 cm)
X-Ray Tube	4 Watts - 6 to 40 kV, 200 µA Rh anode Rh, (Alloy, Precious Metals) 4 Watts - 6 to 50 kV, 200 µA anode Rh or Au (Geo-Mining, Geo-Soils and RoHS)
Detector	7mm ² SDD (active area), 170eV resolution FWHM at 5.95Mn K-alpha line.
Available Applications	Alloy, Precious Metals, Geo-Mining, Geo-Soils, RoHS, Empirical (Other to come)
Filters	Up to 6 depending on applications
Temperature Range	10°F to 130°F (-12 °C to 55 °C)
Environmental	IP 54 equivalent level
Protection	The detector is protected with an automatic shutter device that opens only during analysis or a grid
Analytical Ranges	<p>Alloys : Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, Se, Y, Zr, Nb, Mo, W, Ta, Hf, Re, Au, Pb, Bi, Ru, Pd, Ag, Cd, Sn, Sb</p> <p>Precious Metals: Ti, Cr, Mn, Fe, Co, Ni, Cu, Zn, Ga, W, Au, Ge, Ir, Pt, Au, Pb, Bi, Zr, Mo, Ru, Rh, Pd, Ag, Cd, In, Sn, Sb</p> <p>Geo-Mining: Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, As, Se, Sr, Rb, Zr, Nb, Mo, W, Ta, Au, Hg, Pb, Bi, U, Ag, Sn, Sb, S, K, Ca</p> <p>Geo-Soils: Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, As, Se, Sr, Rb, Zr, Nb, Mo, W, Ta, Hg, Pb, Bi, Ag, Cd, Sn, Sb</p> <p>RoHS Alloys : Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, As, Se, Zr, Nb, Mo, Pd, Ag, Cd, Sn, Sb, Hf, Ta, W, Re, Au, Hg, Pb, Bi</p> <p>RoHS Polymers : Cl, Ca, Ti, Cr, Fe, Ni, Cu, Zn, As, Se, Br, Zr, Ag, Cd, Sn, Sb, Ba, Hg, Pb</p> <p>Catalytic Converters : Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, As, Se, Sr, Rb, Zr, Nb, Mo, W, Ta, Au, Hg, Pb, Bi, Ag, Sn, Sb, Rh, Pt, Pd</p> <p><i>Addition of other elements possible as option on request</i></p>
Processor	ARM Cortex -A9 dual-core / 1.2GHz Memory: 1GB DDR2 RAM, 1GB NAND Results Storage: 8GB SD
Signal Treatment	14-bit ADC 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 50nS – 24uS peaking time
Batteries	2 rechargeable Li-ion batteries with 4 hours autonomy each, external charger and mains power supply (110/240 VAC, 50/60 Hz). Hot swap capability (60 sec max)
Transport Case	Reinforced and compact, air transport compatible, 44 x 36 x 19 cm, 6.2 kg
Cameras	Two, micro and macro, high-resolution color CCDs: scan area (macro) or whole sample (micro)
Display	5" color touchscreen Smartphone type display – Power VR SGX540 3D graphic.
Connectivity Operating system Memory	Wi-Fi, Bluetooth, USB, supplied with SciAps Profile Builder PC software and USB-C/USB cable. System under Android, possibility to export PDF and Excel reports directly from the analyzer without third-party software. Memory capacity of more than 10,000 analyzes
Calibrations	Fundamental parameters. For Geochem and Env. Soil Apps, users may also choose "Compton Normalization" method and/ or use empirically derived calibrations.
Calibration	Internal or External shutter SS 316 standard for totally automated calibration and energy scale validation
Alloys Libraries	Contains more than 500 alloy grades, Open libraries in .csv format that can be modified by the customer, Management of multiple libraries directly on the analyzer
Safety	Use protected by password (user level) and internal parameters (administrator) Automatic sample presence detection by camera and XRF return signal
Conformities	CE, RoHS, USFDA, Canada RED Act, NFC74-100 and ASN (France) ASN Reference of the X-50 : XSCIAPS001
Furniture's	Transport case, backup USB key, user manual in French and English, Allen key, set of spare Prolene or Kapton windows, calibration certificate

Note : Information provided for information only: SciAps analyzers benefit from continuous technical software and hardware improvements



Demonstration videos and presentations of the analyzers available on our YouTube channel:



<https://www.youtube.com/channel/UCvG4D5fpLkpAwVYu1iAcoMA>