

Alpha Series

analyzers provide on-site RoHS & WEEE compliance verification.

For plastics and solder analysis – without radioactivity – Innov-X offers the smallest, fastest and most versatile handheld XRF analyzer available anywhere.

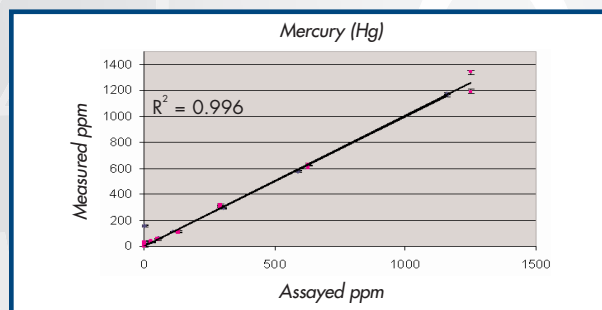
The Innov-X tube-based Alpha Series is isotope free and delivers instant, accurate readings. It features a miniature X-ray tube and high-resolution detector. Engineered around the HP iPAQ pocket PC, the Alpha Series is user-friendly, flexible, upgradeable and has a bright color display for easy viewing in all lighting conditions and a rear-facing LCD display. This analyzer provides fast, reliable, non-destructive screening.

XRF is a standard lab technique for metals and plastics. Now it is available in the field!



82	2	80	2	48	2	35
Pb	8	Hg	8	Cd	8	Br
Lead	18	Mercury	18	Cadmium	18	Bromine
207.2	32	200.59	32	112.411	2	79.904
	18		18			
	4		2			

Mercury in Plastics



INNOV-X SYSTEMSTM
Innovative XRF Technologies



The Alpha Series identifies toxic metals in waste electronics.

Here's a summary of its capabilities:

- RoHS, WEEE, Prop. 65 compliance verification.
- Toxic metals in plastics – Pb, Hg, Cd, Cr, Br & others.
- Pb-free electronics – new alloys, pure metal substitutes, prevention of Sn whiskering.
- FASTSORT of PVC & Br- or Sb-based flame retardants.
- Versatile PDA platform.
- Easy-to-read displays.

Innov-X Alpha Series

The plastics analyzer for fast, confident and non-destructive compliance screening.

Rely on the Alpha Series for accurate screening of electronic parts, components and assembled products. Monitor toxic metals at ppm levels for compliance verification, on-site QC and documented traceability. The analyzer is applicable to each link in the supply chain: manufacturer, supplier, distributor and end user.

FASTSORT high-speed sorting.

Alpha Series FASTSORT provides fast sorting of PVC and Br-based flame retardants. This tube-based analyzer quickly delivers reliable quantitative analysis of lead in solder for Pb-free electronics requirements. It also fast sorts pure metal and alloy substitutes such as, Sn, Ag, Cu, Zn, Bi, In, Sb and Cd. In addition, it can even measure P, a typical component of a flame retardant substitute for Br.

Typical Plastics Performance.

Cd	30 ppm
Pb, Hg	10 ppm
Br	5 ppm
Cr	40 ppm
Sb	45 ppm

Software for a variety of plastics.

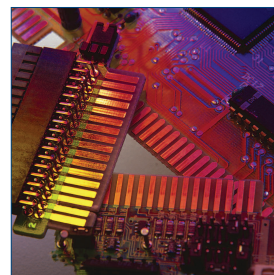
- Automatically determine plastic type with a single calibration for elements of interest.
- Accuracy of results is independent of specific plastic matrices.

Cutting edge PDA technology.

The Alpha Series is driven by the HP iPAQ pocket PC. Data entry is instant. Reports are generated on the spot. Upgrades are possible over the lifetime of the analyzer.



Custom holster lets you take alpha series anywhere.



Use Alpha Series to analyze for Pb-free compliance.

Basic Specifications.

Weight: 2.625 lbs. (base wt.) 3.375 lbs. (1.6 kg.) with batteries.

Excitation Source: X-ray tube, W anode, 10-40 kV, 10-50 μ A, up to 6 wheel positions and 5 filters.

LEAP: Delivers industry-leading detection limits on critical elements Cr, Cl, P.

Detector: Si PiN diode detector, < 230 eV FWHM at 5.95 keV Mn K-alpha line. Temperature Range: -10°C to +50°C.

Operation: Trigger or Start/Stop Icon. One-touch trigger or "deadman" trigger option. Optional control from external PC.

Power: Li-ion batteries, rechargeable (charger included). Powers analyzer and iPAQ simultaneously. AC Adapter optional.

Battery life: 8 hours (typical duty cycle), 4 hrs continuous (tube on) operation.

Number of Elements: Standard package includes 20 elements.

Standard Elements: Pb, Cr, Hg, Br, Cd, Sb, Cl, P, Ti, Mn, Fe, Ni, Cu, Zn, Bi, Sn, Ag.

Display Screen: Color, high resolution touchscreen. Variable brightness provides easy viewing in all ambient lighting conditions.

Data Display: Concentrations in ppm, spectra and/or peak intensities (count rate) or user-specified units, depending on software mode selected.

Memory, Data storage: Minimum 20,000 test results with spectra, upgradeable to >100,000 test results with upgrade to 1 Gb flash card.
128 Mb standard memory.

Processor: Intel 400 MHz StrongArm processor.

Operating System: Microsoft Windows CE (portable system) or Windows (PC-based). Software Modes: Quantitative for accurate chemical analysis, FASTSORT for high speed sorting (2 sec tests) of PVC or Brominated plastics.

Specifications subject to change without notice.



22 Ti Titanium 47.867	23 V Vanadium 50.9415	24 Cr Chromium 51.9415	25 Mn Manganese 54.938049	26 Fe Iron 55.8457	27 Co Cobalt 51.9415	28 Ni Nickel 58.6934	29 Cu Copper 63.546	30 Zn Zinc 65.39	31 Ga Gallium 69.723	32 Ge Germanium 72.61
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