

Thermo Fisher Scientific has made a giant leap forward with the next generation of portable XRF analyzers: the handheld Thermo Scientific NITON XL3p. Building on the success of the award-winning NITON XLp platform, the NITON XL3p Infiniton™ (²⁴¹Am radioisotope) based XRF analyzer continues to lead the market through excellence in innovation.

Thermo Scientific NITON® XL3p



History of Innovation

In 1999, NITON, now part of Thermo Fisher Scientific, pioneered the introduction of lab-quality isotope-based handheld x-ray fluorescence (XRF) analyzers. Since then, the features and performance of these instruments have improved dramatically, resulting in the groundbreaking Thermo Scientific NITON XL3p. Featuring the patented Infiniton™ source with a half-life of 432 years, the NITON XL3p is the product of a multi-year platform development initiative, improved source geometry and the latest in advanced analog and digital electronics design. Featuring a high performance thermoelectrically cooled detector, 80 MHz real-time digital signal processing, and dual state-of-the-art embedded processors for computation, data storage, communication and other functions, the XL3p incorporates a host of new features directly benefiting the customer. From the integrated adjustable-angle tilting color touch-screen display to the customizable menus for ease of use, the ergonomic new XL3p Series analyzers are both the lightest weight and most ruggedly constructed handheld XRF analyzers worldwide.

With their rugged construction and sources that never need replacement, XL3p Series instruments have the lowest ownership costs of any portable XRF analyzer. NITON XL3p 800 Series analyzers are capable of the nondestructive analysis of virtually all metal alloys for scrap metal recycling, casting & fabrication, manufacturing and Positive Material Identification (PMI). Alloy grade ID and pass/fail analysis is common in 1-2 seconds, with accurate chemistry in as little as 3-5 seconds. The new XL3p Series 500 and 600 Series analyzers are ideal tools for many mining and environmental testing applications, respectively.

Simply Superior XRF Analysis

The XL3p's analytical power alone puts it in a field by itself; with many standard features and available options, the XL3p stands far above the competition. Integrated USB and Bluetooth™ communications provide direct data transfer to the user's PC or networked storage device, eliminating cumbersome data syncing procedures required by PDA-based devices. A clip-on weld mask and folding test stand help users safely analyze difficult to measure samples, while the optional heat shield extends the

NITON XL3p Series analyzers provide many distinct advantages:

- Very easy to use – even by non-technical personnel
- Lowest long-term cost of ownership of any portable XRF analyzer
- Improved cycle time for high sample throughput



Analyze all forms and types of samples quickly and accurately.

NITON XL3p Specifications



Take the lab with you, anywhere, anytime!

hot-surface testing capability from 600 °F (315 °C) to 1000 °F (538 °C), protecting both the XL3p and the operator's hand from these elevated temperatures. Each of two standard lithium-ion battery packs provide the power to work up to 18 continuous hours in the field, while the holster provides safe storage and transport around the job site. Use the standard NDT® software suite to customize the instrument, set user permissions, and print certificates of analysis and reports, or to remotely monitor and operate the instrument hands-free.

Whether you need an analyzer for metal alloy analysis, ore grade control or environmental compliance testing, the Thermo Scientific NITON XL3p combines the analytical performance of lab-grade instrumentation with the only portable XRF that never requires source replacement for high speed performance, ease of use and cutting-edge technology customers have come to expect from their NITON analyzers.

Thermo Scientific NITON XL3p analyzers are just one of Thermo Fisher's Portable NITON Analyzer Solutions which include analysis tools for metal alloy identification, lead-based paint testing, RCRA metals in soil, RoHS and WEEE compliance screening and a host of other analysis needs.

Weight	< 2.0 lbs (< 0.9 kgs)
Dimensions	9.60 x 9.05 x 3.75 in (244 x 230 x 95.5mm)
Source	30 mCi sealed ²⁴¹ Am Infiniton radioisotope source
Detector	High-performance Si PIN diode
System Electronics	533 MHz ARM 11 CPU 300 MHz dedicated DSP 80 MHz ASICS DSP for Signal Processing 4096 Channel MCA 32Mb Internal System Memory/ 128Mb Internal User Storage
Batteries	Two 4 (or optional 6) Cell Lithium-ion Battery Packs
Display	Adjustable angle VGA color touch-screen display
Standard Analytical Range	>25 elements from Ti to U
Data Storage	Internal >10,000 readings with spectra
Data Transfer	USB, Bluetooth and Serial Communication RS-232
Security	Password-protected user security
Mode (Varies by Application)	Compton Normalization (CN) Bulk Sample Analysis Fundamental Parameters (FP) Bulk Sample Analysis Thin sample analysis Empirical calibration and Combined FP plus empirical calibration analysis Pass/Fail testing Signature Match analysis and SuperChem™ Analysis
Data Entry	Touch-Screen Keyboard User-Programmable Pick Lists Optional Remote Barcode Reader
Standard Accessories	Locking shielded carrying case RFID Reader/Encoder Shielded belt holster Spare battery pack 110/220 VAC battery charger / AC adaptor PC connection cable NDT (NITON data transfer) PC software Safety lanyard Check Samples/Standards
Optional Accessories	Portable test stand, Stationary test stand, Tripod stand Extension pole Welding mask HotFoot™ hot surface adapter Soil testing guard
Licensing/Registration	Varies by region. Contact your local distributor
Compliance	CE, RoHS

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