Product Specifications

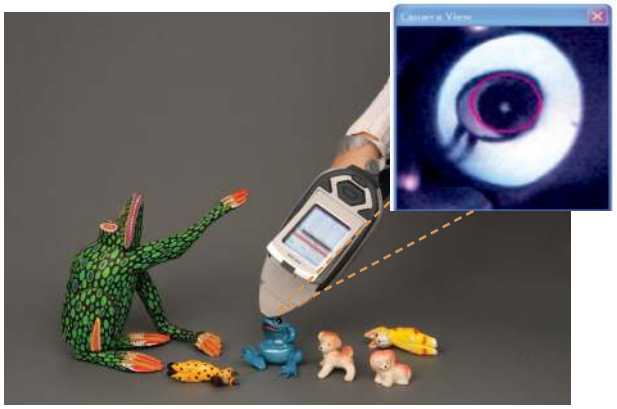
Thermo Scientific Niton XL3t GOLDD XRF Analyzer

The Thermo Scientific Niton XL3t x-ray tube-based x-ray fluorescence (XRF) analyzer with GOLDD technology is purpose-built for your most demanding applications. Where low detection limits and high sample throughput are critical, our combination of hardware, software, features, and direct industry experience are combined to provide you with a solution to your most difficult analytical requirements.



Thermo Scientific Niton XL3t GOLDD analyzers provide you with many distinct advantages:

- **High count rate for lower detection limits and faster analysis**
- **True lab-quality performance in a handheld instrument**



CCD camera and small-spot feature isolates and stores small sample area measurements.

Breakthrough Technologies – The GOLDD Advantage

The Thermo Scientific™ Niton™ XL3t analyzer combines advanced electronics and materials technology with dynamic features and the most versatile x-ray tubes ever used in a handheld XRF instrument. When this power is harnessed to our groundbreaking Thermo Scientific™ GOLDD™ technology, it takes your analytical capabilities to a whole new level. The direct benefits to you include: real-time results and ultimate performance in our robust, proven design. From their extraordinary speed and precision to the integrated, tilting, color, touch-screen display and the customizable menus for ease of use, ergonomic Thermo Scientific™ Niton™ XL3t GOLDD™ analyzers are lightweight, ruggedly constructed, and fast.

What is the GOLDD advantage? GOLDD technology delivers vast improvements in sensitivity or measurement times – as much as 10-times faster than conventional Si-PIN detectors, and up to 3-times more precise than conventional silicon drift detectors (SDD). We achieved this improvement by uniquely combining an improved Niton XL3t 50kV, 40 µA x-ray tube, closely optimized geometry, and patented signal processing hardware and software. These advantages are coupled with our proprietary drift detector, one of the largest area drift detectors that is commercially available in a handheld XRF analyzer, providing you with superior performance in the form of faster analysis and lower detection limits. The final product is the Niton XL3t GOLDD... a more versatile and technologically advanced handheld XRF analyzer, designed without compromise to make you more successful.

The Instrument of Choice

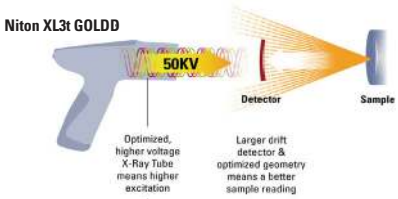
The Niton XL3t GOLDD is the instrument of choice when you require extreme accuracy, precision, and ease of use, with its faster analysis, and higher precision. It is the ideal instrument to measure toxic substances in:

- consumer goods
- environmental applications
- electronics
- health & beauty products

The improved limits of detection put the Niton XL3t GOLDD on par with most laboratory grade systems used in testing consumer products for toxic elements.

The Niton XL3t GOLDD stands alone with its many standard features and available options. You can pinpoint areas of interest on a sample using the integrated color CCD camera and the optional integrated 3 mm small-spot collimation, and then store the test area image along with the analysis data. Take advantage of the standard Thermo Scientific Niton Data Transfer (NDT©) PC software suite to customize the instrument. You can set user permissions, generate custom reports, print certificates of analysis personalized with your own company logo, or remotely monitor and operate the instrument hands-free from your PC. Integrated USB and Bluetooth™ communications provide direct data transfer to your PC or networked storage device, eliminating the cumbersome data synchronization procedures required by Windows Mobile®-based XRF analyzers.

Product Specifications



Large area drift detector and optimized geometry for more x-ray counts: you get faster and more precise readings.

TestAll Tells All

TestAll Technology, with its automatic mode selection, determines whether lead is present on the surface coating or in the substrate of the sample undergoing testing. It then applies the appropriate analysis mode, helping to eliminate guesswork for faster, more efficient screening and allowing non-technical users to easily perform measurements with minimal training.

Meeting the Compliance Demand

An effective screening program using Thermo Scientific Niton XL3t GOLDD analyzers greatly reduces the chance that non-compliant materials will enter the manufacturing process or accidentally end up on store shelves. These tools allow the operator to analyze elements that are part of ASTM F2617, IEC 62321, and U.S. EPA Method 6200 and in compliance with the Consumer Product Safety Improvement Act (CPSIA), California Proposition 65, EN 71-3, Restriction of Hazardous Substances Directive (RoHS/WEE), and the Resource Conservation and Recovery Act (RCRA).

Niton XL3t Analyzers – The GOLDD Standard

Whether you need an analyzer for environmental applications, or electronics and consumer goods testing, the Thermo Scientific Niton XL3t GOLDD raises the bar – combining the outstanding analytical performance of lab-grade instrumentation with the high-speed performance, ease of use, and cutting-edge technology that you have come to expect from Thermo Scientific portable XRF analyzers.

Thermo Scientific Niton XL3t GOLDD analyzers represent just one of our handheld analyzer solutions, which include XRF tools for metal alloy identification, mining and exploration, lead-based paint testing, RCRA metals in soil, toy and consumer goods testing, RoHS and WEEE compliance screening, and many other analysis needs.

Thermo Scientific Niton XL3t GOLDD Specifications

Weight	**< 3.0 lbs (< 1.3 kg)**
Dimensions	**9.60 x 9.05 x 3.75 in. (244 x 230 x 95.5 mm)**
Tube	**Au anode (9-50 kV, 0-40 µA max)**
Detector	**Geometrically Optimized Large Area Drift Detector (GOLDD)** **Proprietary detector with 180,000 throughput cps** **Resolution: < 185 eV @ 60,000 cps @ 4µ sec shaping time**
System Electronics	**533 MHz ARM 11 CPU** **300 MHz dedicated DSP** **80 MHz ASICS DSP for signal processing** **4096 channel MCA** **32 MB internal system memory/128 MB internal user storage**
Display	**Tilting, color, touch-screen display**
Standard Analytical Range	**Up to 30 elements from S – U (varies by application)**
Data Storage	**Internal >10,000 readings with spectra**
Data Transfer	**USB, Bluetooth, and RS-232 serial communication**
Security	**Password-protected user security**
Mode (Varies by application)	**Alloy Modes: Electronics Alloy** **Bulk Modes: Soil, Mining, TestAll™** **Plastic Modes: RoHS Plastics, Toy & Consumer Goods Plastics, TestAll,** **Custom Modes: Upon request (based on application feasibility)**
Data Entry	**Touch-screen keyboard** **User-programmable pick lists** **Optional wireless remote barcode reader**
Standard Accessories	**Integrated CCD camera for locating and storing images** **Locking shielded carrying caser** **Shielded belt holster** **Two lithium-ion battery packs** **110/220 VAC battery charger/AC adaptor** **PC connection cables (USB and RS-232)** **Niton Data Transfer (NDT) PC software** **Safety lanyard** **Check samples/standards**
Optional Features and Accessories	**3 mm small-spot collimation** **Thermo Scientific SmartStand™ portable test stand, stationary (bench-top) test stand, mobile test stand, Field Mate™** **Thermo Scientific Extend-a-Pole™ extension pole** **Soil testing guard**
Licensing/Registration	**Varies by region. Contact your local distributor.**
Compliance	**CE, RoHS**

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