## Thermo Scientific Niton XL2 GOLDD XRF Analyzer

Thermo Scientific Niton XL2 GOLDD x-ray tube-based x-ray fluorescence (XRF) analyzers are purpose-built for your demanding applications. When speed, accuracy, and reliability count, our combination of hardware, software, and direct industry experience helps meet your specific analytical requirements. The Niton XL2 GOLDD — the performance-leading solution from the pioneer in handheld XRF instrumentation. Leadership through excellence in innovation.



Thermo Scientific Niton XL2 GOLDD analyzers provide you with many distinct advantages:

- Light element detection (Mg, Al, Si, P, S) without helium purge vacuum
- Rugged design for real-world industrial environments
- From turn on to trigger pull to confident results in seconds



Perform light element analysis for Al alloys and specialty alloys without helium purge or vacuum.

# Premier Performance in a Value Package

The performance-leading Thermo Scientific Niton XL2 GOLDD analyzer offers premier performance and advanced electronics while maintaining the point-and-shoot simplicity that has been the hallmark of all of our x-ray fluorescence (XRF) instruments. With our groundbreaking GOLDD™ technology, your analytical capabilities are taken to a whole new level. The direct benefits to you include: real-time results, light element analysis, and advanced performance in our value package.

Ergonomically designed and featuring daylight-readable icons, the Niton® XL2 GOLDD incorporates customizable menus, multi-language options, and a standard analytical range of up to 30 elements from magnesium to uranium. Sealed against moisture and dust with 100% embedded software tools, these analyzers are lightweight yet ruggedly built to withstand the harshest environments — in the field or on the shop floor.

#### The GOLDD Advantage

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 combining the Niton XL2 GOLDD 45kV, 100  $\mu$ A x-ray tube, closely

optimized geometry, and patented signal processing hardware and software. These advantages are coupled with our 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 XL2 GOLDD — a more versatile and technologically advanced handheld XRF analyzer, designed without compromise to make you more successful.

#### The Instrument of Choice

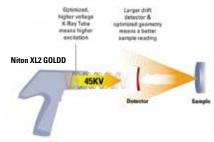
The Niton XL2 GOLDD is the instrument of choice when you require exceptional accuracy, precision, and ease of use, with its fast analysis, high precision, and the ability to measure light elements without helium or vacuum assistance. It is the ideal instrument to:

- Analyze metal alloys for scrap recycling
- Carry out mining exploration and grade control
- Test gypsum for Chinese drywall and sulfur corrosion on copper pipes

For example, the Niton XL2 GOLDD is the definitive tool for scrap metal recycling. It provides immediate nondestructive chemical analysis of alloy materials from aluminum to titanium to nickel, as well as achieving superior performance for tramp and trace element analysis.



#### **Product Specifications**



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

With its unparalleled accuracy, you can be confident that the Niton XL2 GOLDD won't misidentify value, grade, or residuals.

The Niton XL2 GOLDD stands alone with its many standard features and available options. Taking advantage of the standard Thermo Scientific Niton Data Transfer (NDT©) PC software suite to customize the instrument, you can set operator 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.

#### **Niton XL2 GOLDD Analyzers**

Whether you need an analyzer for metal alloy analysis, mining operations, or environmental screening, the performance-leading Niton XL2 GOLDD provides cost-effective high-speed performance, point-and-shoot simplicity, and the cutting-edge technology that you have come to expect from industry-leading Thermo Scientific Niton XRF analyzers.

### **Thermo Scientific Niton XL2 GOLDD Specifications**

Weight	3 lbs 5.8 oz (1.53 kg)
Dimensions	10.25 x 11 x 4 in. (256 x 275 x 100 mm)
Tube	Ag anode 45 kV maximum, 100 uA maximum
Detector	Geometrically Optimized Large Area Drift Detector (GOLDD)
System Electronics	400 MHz ARM 11 CPU
	300 MHz dedicated DSP
	80 MHz ASICS DSP for signal processing
	4096 channel MCA
	64 MB internal system memory/128 MB internal user storage
Display	Fixed angle, color, touch-screen display
Standard Analytical Range	Up to 30 elements from Mg to 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	Alloy Modes: Metal Alloy, Electronics Alloy, Precious Metals
(Varies by application)	Bulk Modes: Mining, Soil
	Plastic Modes: RoHS Plastics, Toy & Consumer Goods Plastics, TestAll™, Painted Products
	Custom Modes: Upon request (based on application feasibility)
Data Entry	Touch-screen keyboard
	User-programmable pick lists
	Optional wireless remote barcode reader
Standard Accessories	Locking shielded carrying case
	Shielded belt holster
	Two 6-cell 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	Thermo Scientific SmartStand portable test stand, stationary (bench-top) stand, mobile test stand, Thermo Scientific Field Mate
	Welding mask
	Soil testing guard
Licensing/Registration	Varies by region. Contact your local distributor.
Compliance	CE, RoHS

Thermo Scientific Niton XL2 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.

©2010 Thermo Fisher Scientific Inc. All rights reserved. Windows Mobile is a registered trademark of Microsoft Corporation. Bluetooth is a trademark of Bluetooth SIG. Inc. All other trademarks are the property of Thermo Fisher Scientific Inc. and its subsidiaries. Specifications, terms and pricing are subject to change. Not all products are available in all countries. Please consult your local sales representative for details.

www.thermoscientific.com/niton

T-206 07/2010

**XRF Analyzers** 

**Americas** 

Billerica, MA USA +1 978 670 7460 niton@thermofisher.com Europe, Middle East, Africa and South Asia Munich, Germany +49 89 3681 380

Asia

Central, Hong Kong +852 2869 6669 niton.asia@thermofisher.com

