



Thermo Scientific  
Niton XL5 Analyzer

**Fast, accurate, expanded alloy ID  
with the future of handheld XRF**

**Thermo**  
SCIENTIFIC

# Welcome to the Future of Handheld XRF

Alloy verification is critical. Recyclers, Fabricators and PMI Inspectors must accurately and quickly determine elemental composition and alloy grade, often in challenging working environments.

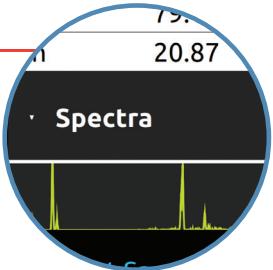


Introducing the Thermo Scientific™ Niton™ XL5 analyzer -- the lightest, smallest and most powerful XRF alloy analyzer in the market. Part of the Niton family of industry-leading instruments, Niton XL5 offers performance, portability and speed never seen in a handheld analyzer until now.

## Advanced Analytical Performance

### Faster, real-time data

Powered by advanced electronics, Niton XL5 generates elemental results faster and more accurately than ever before. Results are displayed in real time, allowing the operator to see material-chemistry data as measurements are being calculated.



Niton XL5 optimizes the geometry between the x-ray source detector and the sample, improving limits of detection and shortening measurement times -- especially for light elements. A wider alloy library increases coverage, and an internal calibration standard ensures accuracy.

## Increased Productivity

### Reduced operator fatigue

At 2.8 lbs. (1.3 kg.), Niton XL5 is the lightest and smallest handheld XRF alloy analyzer available for elemental composition and alloy ID. Light weight and modern ergonomics reduce operator fatigue in field environments such as rope access PMI.



A micro and macro camera allows more precise positioning of the analyzer on the sample while capturing an entire sample image for better record keeping.



# Expanded Field Use

## Ready when you are

Compact geometry improves portability and overall handling. Sleek, industrial design enables the operator to reach awkward or tight welds, corners and joints for critical alloy measurements and more comprehensive inspections in the field.



Niton XL5 ships with a hot-swappable battery so the analyzer is ready when you are. Fully charged in 4 hours on DC power, the battery can be trickle charged with a USB connection or 12V DC automobile power source. The Niton XL5 is not just for metal analysis, but provides expanded use in measuring scale, sludge, oil, powders and slurries.

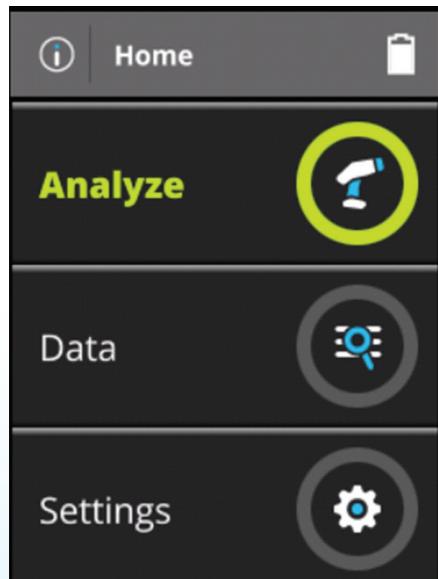
# Vivid Navigation

## New icons and tilting touch screen

Intuitive, simplified software with customizable workflow solutions creates a significantly improved user experience. A tilting, color touchscreen with swipe functionality enables viewing from multiple angles.



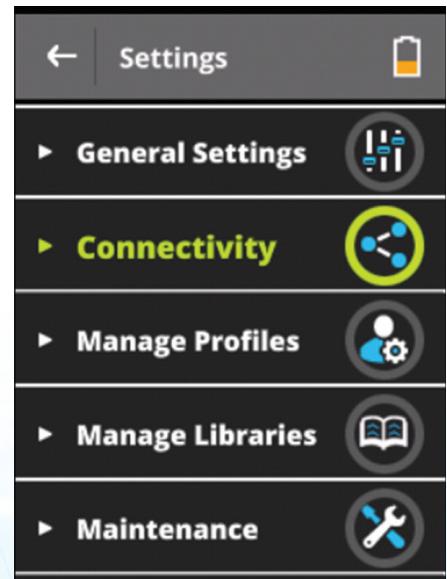
On-device user management software supports multiple user profiles. The Niton XL5 provides easy access to scanning (Analyze), reviewing data (Data) and device settings (Settings) and results are presented concisely for quicker and easier interpretation. Custom profiles can be created for specific analysis requirements, or manager/operator profiles, etc.



Home screen

#1,118		
Main	Low	Light
<b>SS-309</b>	0.95	Excellent
Ele	%	±2σ
Fe	61.700	0.685
Cr	22.754	0.413
Ni	12.556	0.505
Mn	1.657	0.303
LEC	0.498	0.000
Mo	0.493	0.027
Nb	0.093	0.012
Below LOD		
±3σ		

Data scan results screen



Analyzer device settings screen



# The Future is in Your Hands

## Why wait?

Faster, powerful and expanded alloy ID is within your reach.

The Niton XL5 analyzer verifies a wider range of metal alloys faster and more accurately than ever before. Its sleek, compact design enables operators to greatly expand field use, improve QA/QC and increase confidence in risk-management practices.



Furthermore, you can trust that the Thermo Scientific Niton family stands behind you, ready to support your needs and deliver maximum performance for your applications.

### Specifications

<b>Weight</b>	2.8 lbs with battery (1.3 kg)
<b>Dimensions</b>	9.54 x 8.19 x 2.67 in. (242.56 x 208.17 x 67.9mm)
<b>Tube</b>	Ag anode (6-50kV, 500uA max, 5W max) Dynamically adjustable current for optimal sensitivity for every analysis
<b>Detector</b>	Geometrically Optimized Large Area Drift Detector (GOLDD)Proprietary detector with up to 180,000 cps throughput Typical Resolution: 150 ev- 185 eV depending on shaping time used
<b>System Electronics Processor</b>	iMX6 quad core ARM A9 running at 800 MHz 80 MHz ADC ASIC for digital pulsed processing 4096 channel MCA 512 MB internal system memory / 16 GB industrial grade storage
<b>Display</b>	Tilting, color, touch-screen display
<b>Standard Alloy Analytical Range</b>	More than 30 common elements for rapid alloy identification Ultra-low light element detection
<b>Data Storage</b>	130,000 readings with spectra (fewer, if micro and macro images are saved) Assumes 12 GB of user data storage, 100 kB per spectrum
<b>Data Transfer</b>	USB, Bluetooth (to support print functionality)
<b>Global Positioning</b>	GPS data included with sample information
<b>Security</b>	Password-protected user security
<b>Modes</b>	General Metals; Precious Metals
<b>Data Entry</b>	Touch-screen keyboard User-programmable pick lists
<b>Languages</b>	Spanish, French, German, Chinese, Japanese, Russian
<b>Standard Accessories</b>	Integrated CCD camera for locating and storing images Locking shielded carrying case Two lithium-ion battery packs 110/220 VAC battery charger/AC adaptor PC connection cables (USB) NitonConnect PC software Safety lanyard Check samples
<b>Optional Features and Accessories</b>	3mm small-spot collimation Thermo Scientific™ portable test stand Belt Holster Hotwork standoff
<b>Licensing/Registration</b>	Varies by region. Contact your local distributor.
<b>Compliance</b>	CE, RoHS, FCC, Industry Canada, Safety to IEC 61010-1:2010, IP54

[www.thermoscientific.com/portableid](http://www.thermoscientific.com/portableid)

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**Americas**  
Boston, USA  
+1 978 670 7460  
niton@thermofisher.com

**Europe, Middle East, Africa**  
Munich, Germany  
+49 89 3681 380  
niton.eur@thermofisher.com

**India**  
Mumbai, India  
+91 22 6680 3000  
ininfo@thermofisher.com

**Asia Pacific**  
New Territories, Hong Kong  
+852 2885 4613  
niton.asia@thermofisher.com

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