

# DELTA Element

Powerful, Yet Affordable Handheld XRF



- Fast and Accurate Alloy ID
- Easy-to-use, Reliable and Rugged
- Affordable Elemental Analysis

# DELTA Element

## Our Most Affordable DELTA

The DELTA Element is the most affordable unit in the Olympus line-up of handheld X-ray fluorescence (XRF) analyzers designed for fast, accurate results. Fast, simple and reliable, the DELTA Element incorporates the features and rugged design of the DELTA family. With fast elemental ID for screening, sorting and metals analysis, the DELTA Element provides fast ROI for Scrap, PMI, QA/QC and Jewelry/Precious Metals applications.

With a powerful X-ray tube and Si-PIN detector, the DELTA Element is ideal for simple applications. It provides quick ID, screening, sorting and elemental and metal analysis.

The DELTA Element offers fast measurement with results in seconds, low limits of detection, and outstanding precision.

The DELTA Element's field-worthy and rugged design features rubber overmolds and a ergonomic grip to protect the analyzer. To avoid downtime, the hot swap feature allows the batteries to be swapped out while the analyzer is in use. The DELTA Element features integrated wide area heat sinks for high power use in extreme temperatures.

Olympus' exclusive Grade Match Messaging (GMM) feature provides information simplify verification and streamline operations. Users can assign customized messages to any grade and use real-time or pop-up messages for immediate sorting instructions and improved user efficiency.

## Features and Benefits

- Powerful 4W X-ray tube for optimum element excitation
- Tight geometry for exceptional LODs and fast analysis
- Lightning-fast data acquisition for faster testing time
- Floating Point Processor: Provides more calculations in less time, and leverages more advanced calibration algorithms
- Integrated Bluetooth® for data input and output available in most countries
- Analysis indicator lights visible from 360° to help ensure safe use
- Advanced colortouch LCD screen for clarity, brightness, responsiveness, and energy efficiency for indoor/outdoor use
- Accelerometer technology puts the unit into sleep mode to save energy when not in use; logs impacts for tool management
- DELTA PC software for enhanced data analysis, calibration modeling, and optional closed beam workstation operation
- USB interface port for high-speed downloads and seamless PC control
- Ergonomic rubberized handle for enhanced grip
- Hot Swap batteries to maximize uptime and productivity





# Applications



## Scrap Sorting

DELTA Element XRF Analyzers provide fast, reliable ID in seconds for scrap sorting applications. Designed for durability to withstand the toughest processing environments, the DELTA Element enables reliable sorting and analysis for stainless and other high-alloy steels in seconds.



## Positive Material Identification

When reliable material analysis is required, the DELTA Element provides fast and accurate Positive Material Identification (PMI). To confirm that installed pipes and fittings are to specified material, the DELTA enables testing anytime, anywhere for fast, accurate results.



## Alloy QA/QC

The DELTA Element provides highly specific material chemistry to rapidly and accurately identify alloy grades and pure metals to ensure quality control and assurance. The DELTA Element determines alloy chemistry and grade ID in seconds for fast, simple and accurate elemental ID to confirm material specification from the manufacturer to the end user.



## Jewelry / Precious Metals

The DELTA Element XRF Analyzer for precious metals provides fast, accurate alloy chemistry and karat classification with one nondestructive, nonintrusive test. Whether importing precious metals, selling or producing jewelry, or processing scrap metal, the DELTA Element can determine precious metal content for valuation. Optional Flex Stand provides a shielded sample chamber for small samples and jewelry.

# DELTA Series



## DELTA Premium

The DELTA Premium is equipped for powerful performance to handle the most analytically demanding applications.



## DELTA Professional

The DELTA Professional provides the best value solution with superior performance in speed, LODs and elemental range.



## DELTA Classic Plus

The DELTA Classic Plus provides quick ID, screening, sorting and elemental metals analysis for a large variety of applications.



## DELTA Element

The DELTA Element is the entry-level DELTA, built for economy and fast ROI for basic alloy identification and metals analysis.

## DELTA Comparison\*

DELTA Premium	DELTA Professional	DELTA Classic Plus	DELTA Element
4W Rh, Au, or Ta anode (per application) X-ray tube	4W Ag, Rh, Au, or Ta anode (per application) X-ray tube	4W Au or Ta anode X-ray tube	
Large-Area Silicon Drift Detector	Silicon Drift Detector	Si-PIN Diode Detector	
Alloy and Mining: Mg and up for Rh/Ag and Al and up for Ta/Au; Soil: P and higher		Alloy and Mining: Ti and higher; Soil: P and higher	Alloy: Ti and higher
Weight: 1.5 kg (3.25 lbs) without battery			
Dimensions: 260 × 240 × 90 mm (10.25 × 9.5 × 3.5 in.)			
Environmental Temp Range: -10 °C to 50 °C (14 °F to 122 °F)			
Processing Electronics: 530 MHz CPU with integrated FPU with 128 MB RAM; Proprietary Olympus Digital Pulse Processor (DPP)			
Power: Rechargeable Li-ion battery; Hot-swap maintains analyzer power during battery charge			
Data Display: 32 bit Color QVGA resolution, Blanview transmissive backlit touchscreen; 57 × 73 mm (2.25 × 2.9 in.)			
Data Storage: 1 GB microSD (stores ~75,000 readings)			
Data Transfer: USB, Bluetooth®			

## Standard Accessories\*

- Carrying Case
- Li-ion Battery
- Electronic User Manual and User Interface Guide and Printed Quick Start Guide
- Battery Charger
- Mini USB Cable
- 316 Stainless Steel Calibration Check Reference Coin
- Ten (10) Spare Windows
- Integrated Wrist Strap
- DELTA PC Software
- Factory Authorized Training & Support

[www.olympus-ims.com](http://www.olympus-ims.com)

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