

ORTEC[®]

Micro-Detective

Ultra-Light, High-Fidelity Hand-Held Radioisotope Identifier



Point TRADING
Group

P +61 3 9934 9934 F +613 9686 5533 E pointtrading@pointtrading.com
145 Wells St, South Melbourne VIC 3205 Australia

AMETEK[®]
ADVANCED MEASUREMENT TECHNOLOGY

Micro-Detective Overview

- Accurate nuclide identification based on high resolution gamma spectroscopy with confirmatory neutron detection.
- Definitive detection of illicit special nuclear materials (SNM) trafficking in seconds, in a battery operated instrument.
- Fast, Simple and ULTRA-Reliable Classification of NORM, Medical, Industrial, SNM and Natural isotopes, shielded and unshielded: ANSI N42-34 compliant.
- Multiple uses (e.g.): Hand-Held Nuclide Identifier, Emergency Whole-Body Counter, Ad-hoc Portal Monitor, Search System, Food Monitor.
- Gamma-Ray, SNM and Neutron Search Modes.
- Rugged design for rough handling: dust and water proof (IP67 capable).
- USB and Wireless 802.11 communications; built in GPS.
- Secure Digital (SDIO) slot.

Latest Improvements

- Operating time of up to 5 hours on single battery.
- “Snap-open” battery door for rapid battery exchange with minimal down-time.
- New improved silent running, low-power cryo-cooler.

Introduction

The latest version Micro-Detective® products build on the ORTEC pedigree of HPGe nuclide identifiers which began with the introduction of the ORTEC Detective® in response to the 9-11 aftermath and the realization that it was vital to provide an effective solution to the problem of potential illicit trafficking of nuclear materials by terrorists.

Since 2004, the ORTEC Detective product line capabilities have broadened in scope and now cover a range from large installed freight monitoring systems, search systems and the light weight Micro-Detective products for in-field hand-held operation. All share the same ORTEC HPGe technology and advanced Detective analysis algorithms.

In the latest version Micro-Detective and Micro-Detective-DX instruments, new technology provides an impressive increase in the lifetime of the internal battery: up to 66% longer or 5 hours typical operation on a single charge. A new “snap open” battery door allows an exhausted battery to be replaced in seconds and the instrument re-started with a full battery with almost no interruption to operation.

A new generation low-power cryo-cooler provides “silent running” operation and improved operational lifetime.



A Long and Distinguished Pedigree

ORTEC Detective products are already deployed widely in the battle against illicit nuclear trafficking. Hundreds are being used worldwide by (among others):

Departments of Homeland Security
Emergency Management Teams
Departments of Defense
Civil Support Teams
National Security Organizations
Police Departments
Bomb Disposal Teams
Nuclear Safeguards Organizations
Airport Security Orgainzations
Emergency Response Teams
Nuclear Fuel Manufacturers
Customs and Border Control
Nuclear Researchers
Navy, Army and Air Forces
US NNSA second line of defense “Megaports” initiative
International Atomic Energy Agency