



MIRA XTR DS

Safe, simple and
smart material
identification
system for defense
& security

**PEOPLE
YOU
CAN
TRUST**

**Metrohm
means ...
Spectroscopy!**



 **Metrohm**

Compact chemical identification for the most difficult samples

MIRA XTR DS is THE solution for first responders and military personal who deal with illicit drugs, hazardous materials, and improvised explosive devices (IEDs).

Explosives, chemical warfare agents (CWAs), and narcotics created in clandestine labs are dirty and obscure the Raman signal. When fluorescence is an issue, our competitors turn to 1064 nm.

BUT, A 1064 nm SYSTEM HAS TRADEOFFS

- High laser power – greater risk for sample damage
- Low sensitivity – 1064 Raman is about 70% less sensitive than 785 Raman
- Large size – Bulky internal components make 1064 systems bigger and heavier



MIRA XTR DS – RAMAN WITHOUT COMPROMISE

MIRA XTR DS is the next revolution in Raman spectroscopy. It combines smaller size, higher resolution and longer battery life with the advanced patent-pending algorithms to eXTRACT Raman data. Identify samples accurately and reliably with MIRA XTR DS.

- Low power laser safely measures sensitive samples
- Higher sensitivity and resolution in a smaller footprint
- 20,000 + library entries – the largest library available on any handheld Raman system
- Capable of both bulk and trace identification of fentanyl and other illicit drugs with the ID KIT

Unlimited scope of applications

MIRA XTR DS is the best solution for Sensitive Site Exploitation (SSE) / Intelligence, Surveillance, and Reconnaissance (ISR) missions, determining synthetic routes to illicit materials, explosives, and CWAs.

Mission ready with rapid analysis of suspicious packages and positive ID of cutting agents, narcotics, and more.

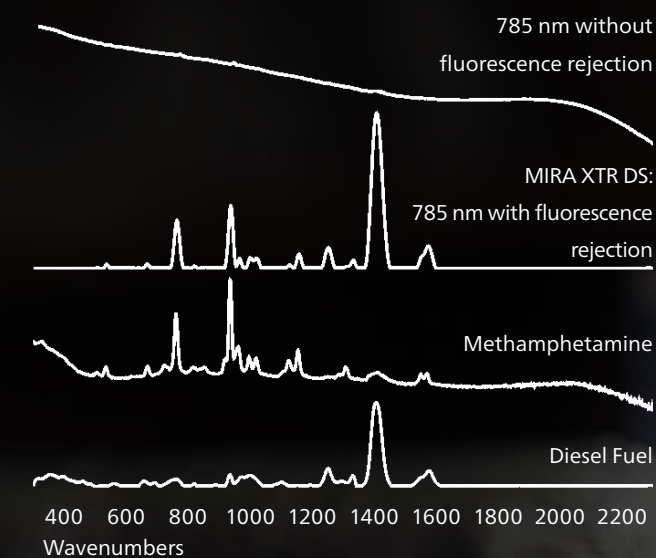


MIRA XTR DS is designed for real-world scenarios like characterization of methamphetamine lab residues and identification of narcotics in street drug samples. This includes ID of narcotics, despite cutting agents that traditionally fluoresce and fail analysis with 785 nm systems. Due to XTR, fluorescence rejection at 785 nm, MIRA XTR DS can interrogate sensitive materials including colored compounds.

CAPABILITIES OF MIRA XTR DS:

- Fluorescence rejection – better detection and better ID of more substances
- ID of synthetic reagents used in the preparation of illicit materials, e.g., solvents, building blocks, activators, and other common chemicals
- ID of trace level concentrations of heroin and fentanyl
- Preliminary analysis of street samples. Positive ID of heroin or cocaine

30% METHAMPHETAMINE IN DIESEL FUEL:



MIRA XTR DS cuts through fluorescence to eXTRACT the Raman signal and identify target substances.

MIRA XTR DS

Supporting your mission with sampling power and flexibility

Intelligent Universal Attachment (iUA)
Sampling through barriers from thin plastic bags to thick glass bottles. In «Container Mode», MIRA XTR DS and iUA recognize container materials (e.g., plastics) for better identification of the contents.



Autofocus Standoff Attachment
Sampling of potentially hazardous materials from up to 2.0 meters away.

Contact Ball Probe Attachment
For identification of unknowns in inaccessible containers and on surfaces.

SERS Attachment
Automatically switches Mira DS XTR from bulk ID mode to trace analysis mode when you need to detect trace drug residues or find the active drug component in a mixture.

OUR HARDWARE PROVIDES UNIQUE FLEXIBILITY FOR SAFE AND CONVENIENT SAMPLING

MIRA XTR DS is your pocket-sized companion for long missions in the field – identifying trace and bulk materials on a surface, in a bottle,

down a barrel, through containers or even across a room. Our interlocking Smart Attachments attach simply and securely, and they automatically let the system know what kind of test you are performing. Our PowerPack supports your mission all day, every day with hot-zone swappable power.

Right Angle Attachment
For identification of unknowns on a surface or in a bag.

Vial Attachment
For identification of powders or liquids in a vial.

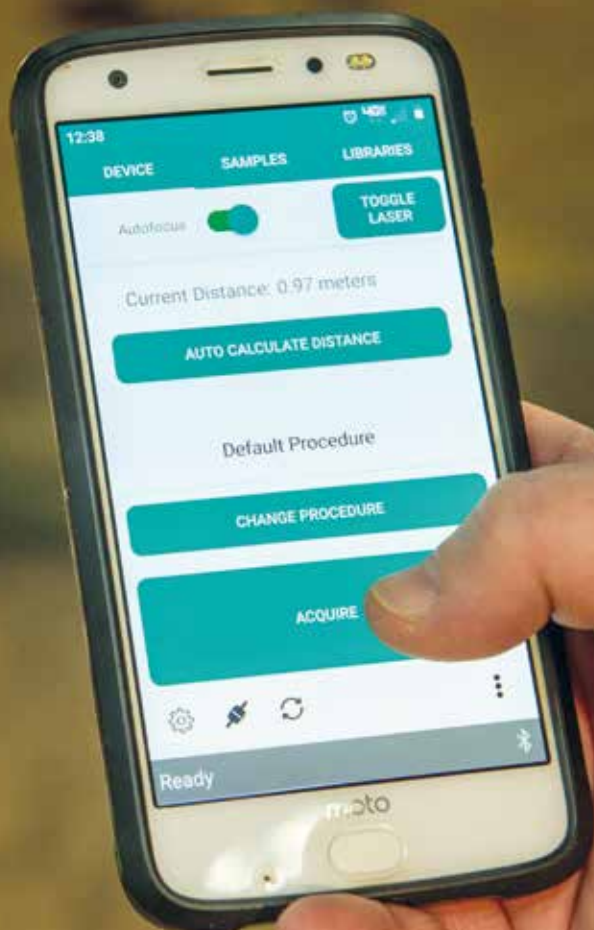


Calibration Standard
Verify device performance before collecting evidence.

PowerPack
Your independent power source for long hours in the field.

Supporting your mission with actionable intelligence

The HazmasterG3™ smart phone App is your virtual expert on site



Interface MIRA XTR DS with the HazmasterG3™ App to instantly provide actionable intelligence. You can predict products and get important chemical information about drugs, explosives, and CWAs. With this information, you can take immediate action to protect yourself, your team, and everyone else.



- SmartAcquire: From sampling, library search, and mixture matching follow a simple guided procedure on the instrument's touch screen
- Mixture matching automatically gives you the top three potential components of a mixture and reports them with color-coded chemical warnings.
- Connect to your support team or the world with the MiraCal M smartphone App for instant in-field risk management. Integrate pictures, coordinates, and send results at the touch of a button.
- HazMasterG3™ is a powerful smart phone App that provides color-coded chemical hazard warnings for >176,000 materials, including exposure and first aid advisories. HazMasterG3™ can also calculate likely mixture outcomes, giving you meaningful results about drugs, explosives, and CWAs.

Reconnaissance without exposure



Identify unknown chemicals from a distance: MIRA XTR DS with the Autofocus Standoff Attachment deployed with the IBEX CBRNE robot.

Manage threats without putting life at risk with IBEX

Enhance your mission capabilities and force readiness with the IBEX CBRNE robot. This unique robot can assess hazards, gather detailed intelligence, and identify unknowns without putting you and your team in harm's way.

The most powerful capability of IBEX is chemical identification. Using MIRA XTR DS and the Autofocus Standoff Attachment, this robot can identify a threat from a distance. Simply use the remote control to navigate IBEX to the threat site and point the laser at the substance you need to identify.

DETAILED INFORMATION ABOUT POTENTIAL ENVIRONMENTAL THREATS

Environmental sensor packs transmit detailed information to the operator about potential environmental threats. The sensors include oxygen readings, CWAs, and radiological/nuclear detectors, and a combustible gas indicator.

The superior maneuverability of IBEX enables you to access compromised or clandestine locations for a wide range of SSE and/or ISR missions. With its flexible arm, IBEX can open doors, move objects out of the way, and collect samples from the hot zone.

ORDERING INFORMATION

MIRA XTR DS Advanced 2.9260.120	
6.02707.020	MIRA DS Ruggedized Carrying Case
6.06071.020	Mira Cal DS USB Stick
6.07501.010	ASTM Calibration Standard
6.07506.000	Right Angle Attachment
6.07506.060	Intelligent Universal Attachment
6.07506.040	Mira SERS Attachment Collection Optics Accessory
6.07502.000	Mira Vial Holder Accessory
6.07507.000	Mira Blackout Cloth
6.2133.020	Lithium Battery AA 1,5 V / 2900 mAh
6.7430.060	NIR micro fiber cleaning cloth
6.02108.010	Cable USB Mini B – USB A 1,5m
6.7560.010	Protective Laser Glasses for Mira
6.6071.650	Mira Lib KnowItAll Full Raman Library Collection
MIRA XTR DS Basic 2.9260.110	
6.07501.010	ASTM Calibration Standard
6.07506.060	Intelligent Universal Attachment
6.02108.010	Cable USB Mini B – USB A 1,5m
Optional Accessories	
6.07506.030	Contact Ball Probe Attachment
6.07506.070	Autofocus Standoff Attachment
6.7560.200	MIRA PowerPack Kit
6.07507.100	MIRA DS Field Carry Pouch
6.6071.640	HazmasterG3 License

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Spectroscopy!**



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