

# MIRA XTR DS handheld Raman spectrometer

## Metrohm launches military-grade system for fast identification of unknowns in the field

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Toxic chemicals hit upon during Sensitive Site Explorations (SSEs), Improvised Explosive devices (IEDs) or powerful synthetic opioids (e.g., fentanyl) can be lethal treats to the lives of first responders and military personnel. Such threats can be reduced with MIRA XTR DS, the latest handheld Raman identification system from Metrohm. MIRA XTR DS can identify more than 20.000 of unknowns in the field and is the most compact handheld Raman spectrometer on the market with the capability to deal with substances emitting fluorescence.

### A powerful laboratory in the palm of your hand

The standard solution to deal with samples emitting fluorescence is a 1064 nm laser, which is used by most manufacturers of handheld Raman identification systems. MIRA XTR DS, on the other hand, combines the smaller size, higher resolution and lower power consumption of a 785 nm laser with revolutionary machine learning to eXTRact a Raman signal even form fluorescent samples. The benefits are considerable:

- Low power 785 nm laser allows interrogation of sensitive samples without the risk of igniting/destroying them
- Low power 785 nm laser allows for a compact, pocket-sized design enabling true single-handed operation
- Lower power consumption than 1064 devices means longer battery life for extended field use

### A forensic chemist to consult – anytime and anywhere

Fully automated, guided workflows make MIRA XTR DS easy to use from sampling unknowns to clear, coded results. MIRA XTR DS can be interfaced with the HazMaster G3 App to instantly provide actionable intelligence. First responders can calculate likely mixture outcomes on site giving them meaningful results and important



No-touch identification of unknown substances in plastic bags or even through plastic containers – possible with MIRA XTR DS and the Autofocus Stand-Off Attachment

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chemical information about drugs, explosives, and chemical warfare agents. With this information, they can take immediate action to protect themselves, their team, and everyone else.

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### About Metrohm

Metrohm is one of the world's most trusted manufacturers of high-precision instruments for laboratory and process analysis. The company was founded in 1943 by engineer Bertold Suhner in Herisau, Switzerland, where it is headquartered to this day. Metrohm offers a comprehensive portfolio of analytical technologies ranging from titration and ion chromatography to near-infrared and Raman spectroscopy, as well as several other techniques. Metrohm sells its products and provides services through its own local subsidiaries and exclusive distributors in more than 120 countries worldwide. Our mission in a nutshell is helping customers from virtually every industry analyze and maintain the quality of their products at every stage in the manufacturing process and beyond. Since 1982, Metrohm has been owned 100% by the non-profit Metrohm Foundation. This foundation keeps to its purpose to support charitable, philanthropic, and cultural projects in eastern Switzerland and, above all, ensure the independence of the company.

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