ID DEMO Kit
Quick Start Guide

ID Kit for Mira DS is designed for detection of opioids in complex street samples. We understand that these sensitive circumstances complicate product demos, so we created the ID DEMO Kit. Reveal the power of P-SERS and Mira DS with a certified heroin standard in a fast, safe, and convenient manner.

Contents
ID DEMO Kit (607506200)

- 1 sample vial
- 1 dropper
- 10 silver P-SERS substrates
- Heroin standard

Additional Requirements

- **Mira DS** Handheld Raman Analyzer (2.926.0020)
- **SERS Attachment** (607506040)
- **MiraCal DS software** (606071010)
  While unnecessary for stand-alone operation of the analyzer, this software can be used to create custom Libraries, Operating Procedures and Training Sets; in addition to analyzing and reporting data.

Ω **Metrohm**
Raman

The SERS Attachment features:

1. Slot to accept substrates at the optimal depth.
2. Hinged cover for easy cleaning.

Laser can be operational when instrument is on and door is open!

Warning!
! Risk of serious eye injuries by laser radiation.
! Follow the safety measures and instructions.
! Instruments of the laser class 3B must be used by trained personnel only.

Cleaning of SERS Attachment

Power down the instrument.
Open the hinged door of the attachment.

CAUTION! Laser is operational when the instrument is on and the door is open!

Wipe down interior surfaces using a kimwipe or swab, ethanol or isopropanol may be used. Cleaning is intended to remove residue from previous substrates, rather than polishing the window.

Test Procedure

Carefully break open the ampoule of Heroin standard by snapping off at the neck. Using the dropper, transfer contents into the sample vial.

Apply sample to the P-SERS test strip using one of two methods:

a Use the dropper to place a drop of solution onto the printed portion of a strip **OR**

b Dip printed portion of the strip directly into solution, taking care to touch only the white portion of the substrate.

Wait 2 minutes for the substrate strip to dry.

Mount the SERS attachment onto Mira DS and turn on the instrument.
- daily calibration of Mira DS is recommended, see Mira DS User Manual for instructions
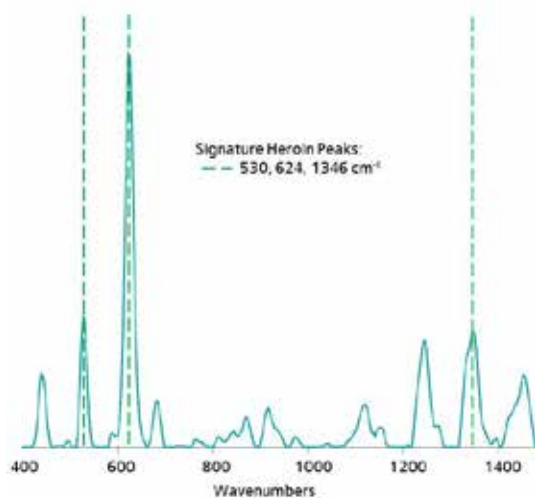- connecting the SERS Attachment activates automated SERS routine.

Insert colored end of the SERS test strip into the slot on the attachment with colored side facing the instrument, stopping when resistance is met.

At the prompt, touch the screen to Arm Laser. Repeat to Acquire a spectrum.

Within seconds, the red warning screen for Opioids, above; will be displayed.

Distinctive SERS Spectrum of Heroin.

For advanced operation, see Mira DS and MiraCal DS user manuals.

www.metrohm.com

Metrohm
Raman