

# Mira P Handheld Raman Spectrometer



Instant on-site verification of materials

# Mira P – easy, fast, flexible, and reliable

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## Flexible: Customize Mira P to suit your unique needs



Operating Procedures

- Customizable reports
- Customizable operating procedures
- Wide variety of sampling options

## Results you can trust: Decisions made with confidence



- Discriminatory algorithms
- Customizable model building
- Clear results

## Evaluation Type

- Material verification with Pass/Fail results
- Material identification based on spectral library searching
- Multi-component identification with Mixture matching



### Barcode scanning

- Barcode scan automatically selects operating procedure and populates:
  - Lot
  - Batch
  - Container

### Simple to use: Straightforward guided workflow



- Foolproof operation with controlled user interface
- Automatic report generation
- Seamless transition between samples

### Fast: Results in seconds



- Increase throughput
- Move quickly from sample to sample
- Complete analysis in seconds

### Acquisition Parameters

- Laser power
- Integration time
- Spectral averaging
- Smart tips



Smart sampling attachments for a wide range of different sample

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### Unique flexibility meets your needs

With a uniquely comprehensive set of sampling attachments, Mira P allows you to verify the contents of any container



### Point-and-shoot Attachments

Mira P comes equipped with two different point-of-contact sampling attachments. The SWD is used for direct contact or thin bags while the LWD is used for thicker containers such as glass bottles.



### Contact Ball Probe

Verify materials by simply immersing the Contact Ball Probe into a liquid or powder.

### Tablet Holder

A spring-loaded mechanism holds large and small tablets for final formulation analysis.



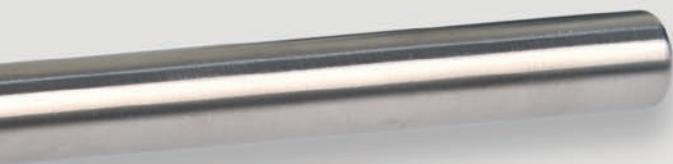
### Vial Holder

The vial holder attachment permits the user an easy, convenient way to measure liquid samples, or even powdered samples that are stored in vials.



### Calibrate/Verify Accessory (CVA)

The CVA consists of an ASTM Raman shift standard and a NIST-traceable verification sample following USP/EP guidance.

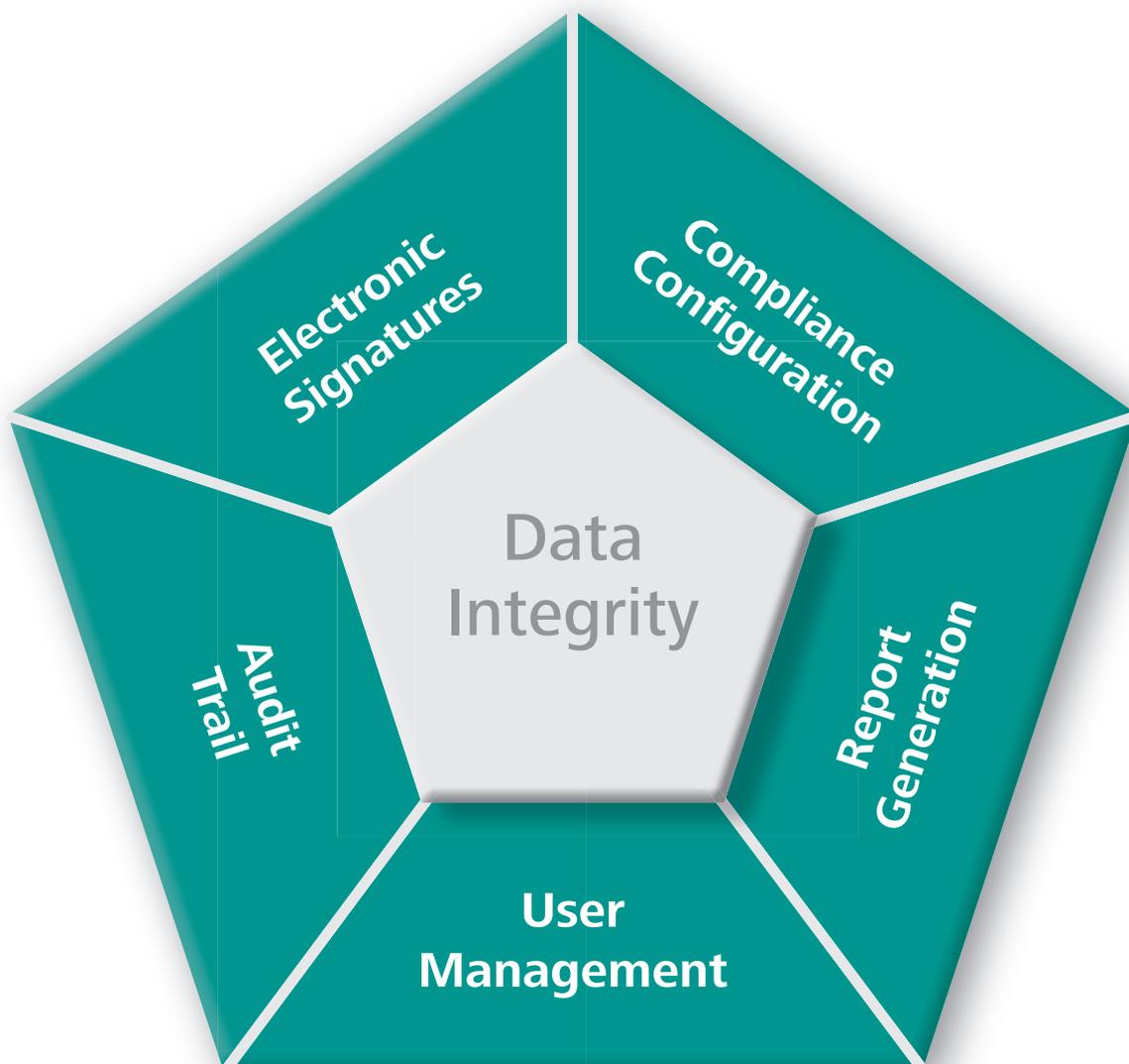


## Mira P – fully compliant with FDA 21CFR Part 11

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**Mira P is fully compliant with FDA 21 CFR Part 11 regulations. It has numerous security features to exceed regulatory requirements.**

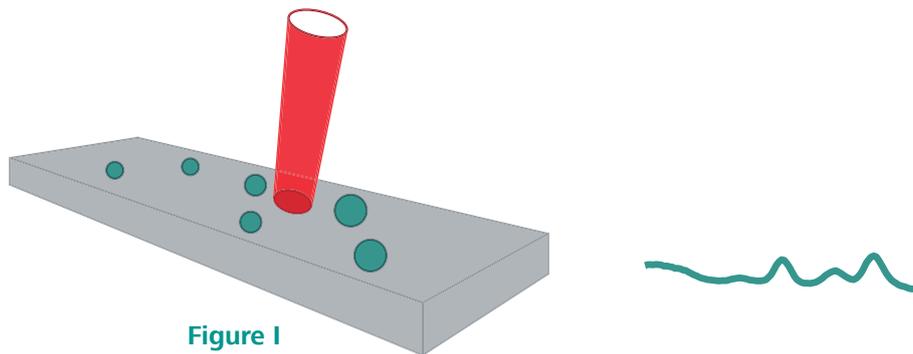
- Multilevel access control with unique user login credentials.
  - 3 pre-defined access levels: Administrator, Laboratory Manager, Routine User.
  - Optional password aging and complexity requirements.
- Audit trail logs every action on the instrument, including the user, date, time, and sampling parameters.
- Secure, electronic records are generated for every measurement on the instrument.
- Records are easily synchronized to a secure database.
- Follows latest USP and EP guidelines on Raman Spectroscopy.



## Patented ORS Technology – superior reproducibility when measuring heterogeneous formulations

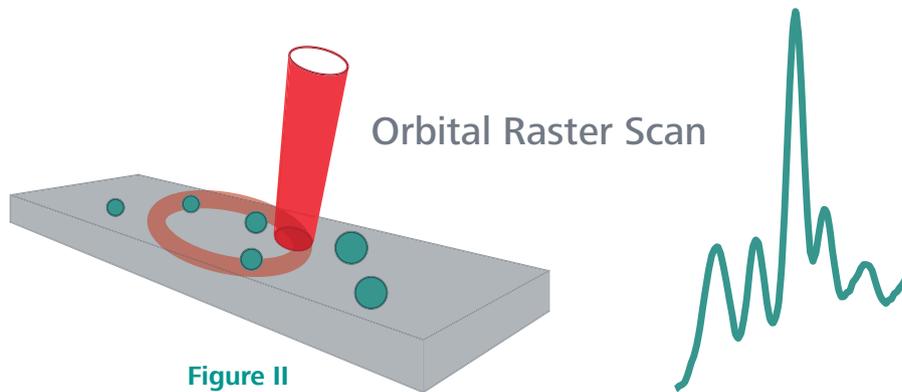
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Conventional Raman spectrometers use a tightly focused laser beam (**Figure I**), resulting in a high spectral resolution. However, with a small beam diameter and the small particle size of many APIs, components in heterogeneous samples can be missed completely. Several spectra must be gathered at different points on the sample for an accurate, reproducible result.



**Figure I**

The Mira P uses ORS (Orbital Raster Scan) technology (**Figure II**) which scans a larger sample area and is more likely to capture dispersed sample components. Using ORS technology, Mira P captures APIs in heterogeneous formulations in a single analysis.



**Figure II**

Orbital Raster Scan

True single-handed operation –  
just 13.0 cm (h) × 8.5 cm (w) × 4.0 cm (d)



Scale 1:1,8

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[www.metrohm.com](http://www.metrohm.com)

