



# i-Raman Series Laboratory Raman Spectrometers

Make Raman spectroscopy  
work for your QC laboratory

PEOPLE  
YOU  
CAN  
TRUST

 **Metrohm**

# Feel like your quality control is... out of control?

**i-Raman laboratory Raman spectrometers help you become more efficient and productive**

In order to improve productivity and efficiency QC labs are adding Raman spectroscopy to their labs to supplement wet chemistry techniques like HPLC and titration that require more time, money, and lab space.



## UNLOCK THE EXTRAORDINARY IN YOUR ROUTINE MEASUREMENTS WITH RAMAN SPECTROSCOPY

i-Raman systems revolutionize the way industrial users perform measurements. Add Raman as a complement to your wet chemical techniques and prepare to shorten your QC to-do list with a faster, greener, and more versatile solution.

### YOUR QC TO-DO LIST ...

#### PREPARE SAMPLES

Lengthy preparation steps like homogenization and extraction increase the chances of sampling errors and cross-contamination.

#### ATTEND TRAINING COURSE

Wet chemistry creates a high barrier for new lab staff to learn and create methods for new products.

#### SCHEDULE WASTE PICKUP

Reagents and waste management can accumulate to added costs of thousands of dollars per year!

#### SCHEDULE SERVICE VISIT

Large chromatography systems require long on-site service maintenance, leading to instrument downtime and manufacturing delays.

### MADE EASY WITH RAMAN!

#### FAST AND EASY MEASUREMENTS

Raman measurements require no sample preparation steps, are nondestructive, and typically take less than 1 minute.

#### INTUITIVE OPERATOR INTERFACES FOR THE ANSWERS YOU NEED

Spend less time training and more time ensuring your lab is meeting its quality goals.

#### LESS WASTE FOR A CLEANER LAB

Raman spectroscopy generates no waste, which saves costs on regular chemical disposal and creates an eco-friendly lab.

#### MINIMAL MAINTENANCE IN A COMPACT FOOTPRINT

i-Raman systems are robust for your QC environment and require minimal day-to-day maintenance.



# Built for your applications

Raman spectroscopy exhibits exceptional selectivity and specificity in analytical applications, enabling quantification and identification of chemical compounds even in complex mixtures. Our team has decades of experience in implementing Raman applications in a broad range of industries.

We have accessories for optimized measurements of nearly every type of sample!

## MATERIALS INDUSTRY

- Carbon D/G band characterization
- Graphene layer analysis
- Nanotube diameter determination
- Foreign body analysis
- Silicon crystallinity determination



## POLYMER INDUSTRY

- Raw material identification
- Quantitative analysis of polymer blends
- Degradation mechanisms
- Plastics sorting



## PHARMACEUTICAL INDUSTRY

- Raw material verification
- Blend uniformity and content uniformity testing
- Polymorph analysis
- Anti-counterfeit analysis
- Finished product confirmation



## FOOD AND BEVERAGE INDUSTRY

- Quantitative quality measurements for key ingredients
- Contamination analysis
- Food fraud investigation



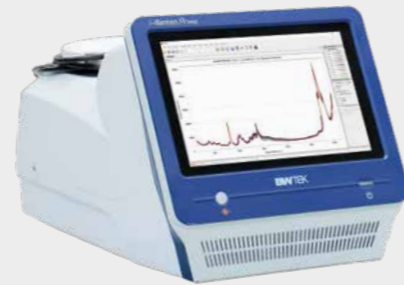
## CHEMICAL INDUSTRY

- Raw material identification
- Measurements of aqueous solutions
- Monitor reactions and intermediates
- Measure impurities and contaminants



# i-Raman<sup>®</sup> Family

## i-Raman<sup>®</sup> Prime



### THE CLEAR CHOICE FOR QUALITY CONTROL

The i-Raman<sup>®</sup> Prime is optimized for QC and routine analysis environments. The **high signal throughput** spectrometer means **faster measurements**, getting you the answers you need in no time at all.

<b>Laser configurations available</b>	532 or 785 nm
<b>Models Range and Resolution</b>	
i-Raman Prime 532	150-3400 cm <sup>-1</sup> , <8 cm <sup>-1</sup> @ 614 nm
i-Raman Prime 785H	150-2800 cm <sup>-1</sup> , <6 cm <sup>-1</sup> @ 912 nm
i-Raman Prime 785S	150-3350 cm <sup>-1</sup> , <8 cm <sup>-1</sup> @ 912 nm

## i-Raman<sup>®</sup> EX



### YOUR CHAMPION FOR CHALLENGING SAMPLES

When no other Raman system can meet the **challenges** of your samples, the i-Raman<sup>®</sup> EX is your best last resort. The 1064 nm laser means **fluorescence-free Raman** measurements are at your fingertips.

<b>Laser configurations available</b>	1064 nm
<b>Models Range and Resolution</b>	
i-Raman EX	100-2500 cm <sup>-1</sup> <10 cm <sup>-1</sup> @ 1096 nm

## i-Raman<sup>®</sup> Plus



### JUST RIGHT FOR RESEARCH

The i-Raman<sup>®</sup> Plus has been a staple in research laboratories for over a decade. This **compact, high-resolution** model makes **research-grade Raman accessible** to everyone, regardless of experience.

<b>Laser configurations available</b>	532 and 785 nm
<b>Models Range and Resolution</b>	
i-Raman Plus 532	65 – 3400 cm <sup>-1</sup> <3.5 cm <sup>-1</sup> @ 614 nm
i-Raman Plus 785H	65 – 2800 cm <sup>-1</sup> < 3.5 cm <sup>-1</sup> @ 912 nm
i-Raman Plus 785S	65 – 3350 cm <sup>-1</sup> < 4.5 cm <sup>-1</sup> @ 912 nm

## ORDERING INFORMATION

### i-Raman Prime

840000673	i-Raman Prime 532
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840000674	i-Raman Prime 785H
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840000675	i-Raman Prime 785S
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### i-Raman EX

840001234	i-Raman EX
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### i-Raman Plus

840000360	i-Raman Plus 532
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840000358	i-Raman Plus 785H
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840000340	i-Raman Plus 785S
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