

# QTRam®

**BW**TEK  
A Metrohm Group Company

Raman Solution

## Portable Raman Spectrometer for Content Uniformity



The QTRam®, powered by B&W Tek's STRaman® technology, is a portable transmission Raman spectrometer that allows for rapid and nondestructive quantitative analysis ideal content uniformity testing of finished products such as tablets and capsules. The unit can be easily operated using 21 CFR Part 11 compliant software for quantitative analysis on the inbuilt tablet computer, while the portable form factor allows users to use it for at-line analysis or in the lab.

### Applications:

**Content uniformity** - ensure the dosage uniformity of the API in solid-dosage finished products including tablets, capsules, and gels as required by the USP <905>

**Formulation development** - support QbD initiatives in quantifying API and excipient concentrations in finished dosage forms

**Counterfeit detection** – calculate API quantity to ensure correct drug and correct dosage

### Features:

- STRaman technology with high-throughput for transmission Raman spectroscopy over large sample volumes.
- Easy-to-use 21 CFR Part 11 compliant software for quick results and reporting
- Portability for at-line or laboratory analysis
- Customizable sample holders to accommodate most sample dimensions
- Step-by-step, easy-to-follow quantitative modeling and method development

### Benefits:

- Quantitative sample composition, crystallinity and polymorphic form from single measurement
- Rapid quantitative results for one or more ingredients in seconds
- No sample preparation
- No consumables
- No disposal cost
- USP-recognized transmission Raman for content uniformity testing

## Specifications:

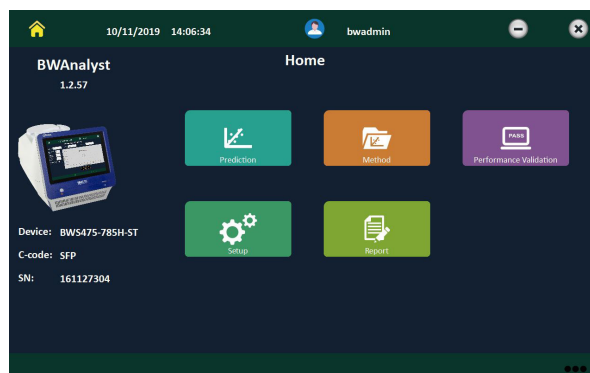
<b>Model</b>	BWS475-785H-CU	
<b>Laser Source</b>	785 nm, full power >420 mW at sample with software-adjustable power	
<b>Software</b>	21 CFR Pt. 11 Compliant BWAnalyst®	
<b>System Configuration</b>	Transmission Raman	
<b>Power Adaptor</b>	Input: 100-240V AC 50/60 Hz, Output: 12VAC @6.6 Amps	
<b>Physical</b>	<b>Main Unit</b>	<b>QT-Sampler®</b>
<b>Dimensions</b>	15.7 in x 10.2 in x 9.8 in (40 cm x 26 cm x 25 cm)	13.01 in x 6.68 in x 6.97 in (33 cm x 17 cm x 18 cm)
<b>Weight</b>	~19.5 lbs (~8.8 kg)	~17.81 lbs (~8.5 kg)
<b>Operating Temperature</b>	0 °C – 35 °C	
<b>Humidity</b>	10% - 85%, non-condensing	

## Software:

B&W Tek offers comprehensive software packages that provide solutions for Raman application needs. Powerful calculations, easy data management, and user-friendly, easy-to-follow workflows are all at the tips of your fingers.

BWAnalyst® is the touch-screen-operated 21CFR part 11 software with a logical workflow for data acquisition, method building, routine analysis and reporting. Once the method is developed and validated, operators can quickly perform quantitative predictions, getting clear results in seconds that are stored in a secure database. The software has configurable reports, with electronic signatures and a full audit trail.

BWIQ® multivariate analysis software is used to develop quantitative models used in BWAnalyst for predictions.



## System Includes:

- QT-Sampler® and two standard sample holders
- Laser safety goggles
- BWAnalyst® touchscreen software
- BWSpec® operating software for exploratory work
- BWIQ® chemometric software

