

The PTRam™ is a 19" rack-mountable Raman analyzer designed for product and process development and used in analytical labs and pilot plant settings.



Features:

- High performance, precise, rugged, and reliable spectrometer
- Long lasting, rock solid laser stability
- Self-calibrating, self-monitoring to ensure the validity of each measurement
- Automated system validation
- 24/7 real-time monitoring
- Single channel fiber-optically coupled sample probe with user-replaceable shaft

Applications:

- Pharmaceutical API Development: Reaction Chemistry, Yield
- Crystallization and Polymorph transition process monitoring
- Pharmaceutical Formulations Development: Blending, Granulations, Drying
- Bioprocessing including fermentation
- PAT/QbD Applications
- Biologics/Biomedical
- Polymerization
- Polymer Blending
- Extrusion Monitoring
- Catalysis Investigation

Specifications:

Model	BWS476-785H
Laser Source, Wavelength	785 nm. Full power 340 mW at sample. Power level adjustable by software from 0 to 100% at 1% increment.
Software	Vision
Spectral Range	150-2800 cm^{-1}
Spectral Resolution*	< 6.0 cm^{-1} @ 912 nm
Sample Channels	1
Input Voltage	100-240V AC 47-63 Hz
Power Consumption	100 W (Max)
Computer Interface	USB 3.0
Unit Dimensions	52 cm x 48 cm x 19 cm
Weight	32 lb (14.5 kg)
Operating Temperature	15 °C to 30 °C
Storage Temperature	-15 °C to 50 °C
Relative Humidity	10% - 85%, non-condensing
Warm up Time	5 minutes
Raman Shift Calibration	Self-calibrating with internal reference

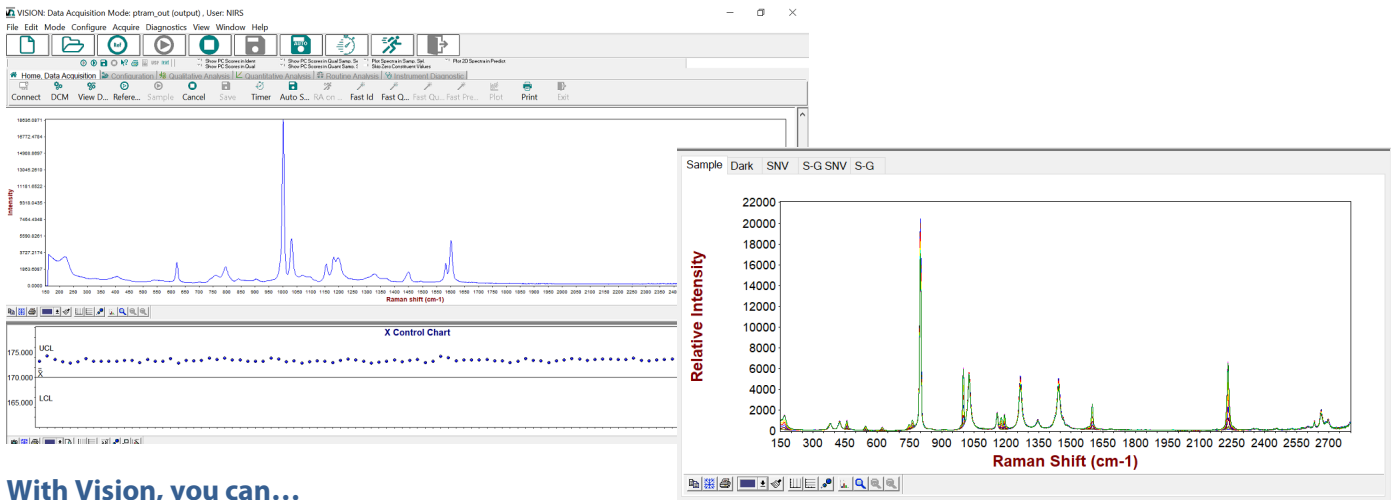
**Resolution measured using atomic emission lines. Raman resolution per ASTM E2529-06 (Standard Guide for Testing the Resolution of a Raman Spectrometer) available upon request.*

Accessories (Included):

- Lab-grade fiber optic probe, 1.5 m length (BAC100B-785-HT)
- ASTM Polystyrene validation standard (NR-PCC)
- Laser safety goggles
- Windows-based Vision® operating software (non-Pharma version)

Software:

Vision® is a software package for spectroscopic analysis and control of B&W Tek portable Raman instruments.



With Vision, you can...

- Acquire data and develop methods for routine real-time analysis.
- Run self-calibration and system monitoring of the PTRam to ensure data validity.
- Create identification, qualification, and quantification methods in a uniform graphical user interface for B&W Tek Raman instruments and Metrohm NIR instruments including i-Raman series, XDS laboratory and process analyzers, and DS2500 analyzers.
- Store, manage, reprocess, and exchange data.
- Perform system tests in compliance with USP and EP.

The system can also be operated with the BWSpec® software, offering full acquisition control, continuous measurements, additional data processing capabilities, and viewing options.

Accessories (Optional):

- 19" rack mount package
- Sampling accessories that can be used with BAC100B probe:
 - 12.0 mm diameter immersion shafts (RIS100-FS and RIS100-SA)
 - High pressure, high temperature immersion shafts (RIS100-SS and RIS100-HS)
 - Hot melt extrusion shafts compatible with standard Dynisco ½-20 UNF ports (RHS100-SSG-08, RHS100-SSE-08)
 - A range of long-working-distance lenses (RTS20x series)
 - Liquid sample cuvette holder (BCR100A)
 - Liquid vial holder (NR-LVH)
 - Raman flow cell (BAC160 series)
 - Probe holder & XYZ positioning stage (BAC151B)
- Large-sampling-area contact probe for heterogeneous solid samples (BAC102-785-ST)
- High pressure, high temperature immersion probe (BAC101)
- Laser Class 1 enclosure for Raman sampling system (BAC152)
- Vision Pharma: 21 CFR Pt 11-compliant version of Vision software
- BWSpec Software
- BWIQ® Multivariate Data Analysis Software