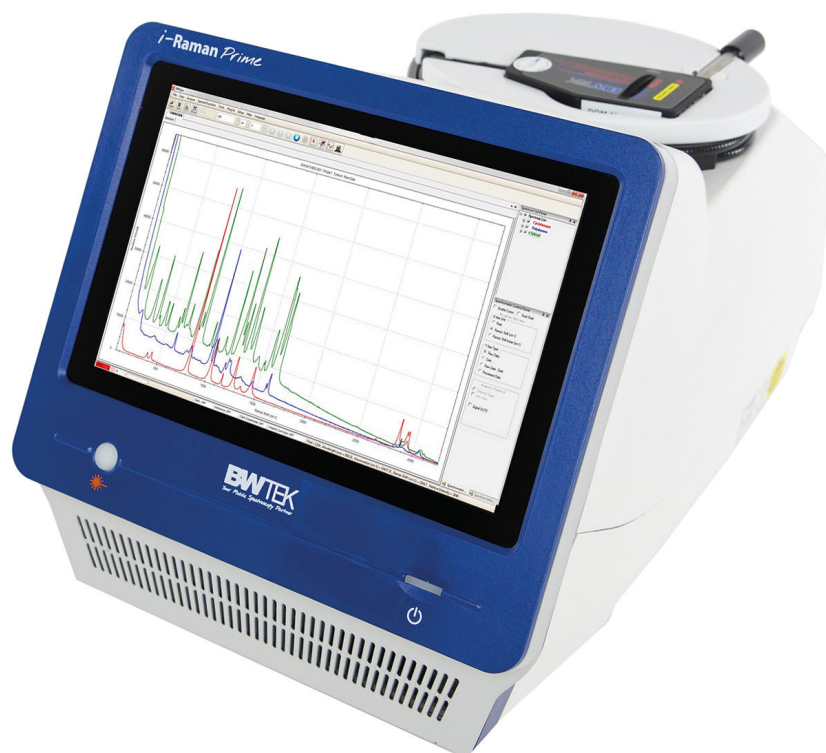




# i-Raman Prime 532H Portable Raman Spectrometer

BWT-840000673

The i-Raman<sup>®</sup> Prime 532H is a low-noise, high-throughput, and fully integrated Raman system with an embedded tablet computer and a fiber-optic sampling probe. Using a high-quantum-efficiency CCD array detector with TE deep cooling (-25 °C) and high dynamic range, this portable Raman spectrometer delivers research-grade Raman analysis capabilities, including real-time quantitation and identification. The high throughput gives Raman spectra with excellent signal-to-noise ratio, making it possible to measure rapid processes and to measure even the slightest Raman signals, detecting subtle sample differences.

In addition to its portable construction, the i-Raman Prime 532H features the unique combination of wide spectral coverage and high resolution, thus enabling measurements from 150 cm<sup>-1</sup> to 3400 cm<sup>-1</sup>. The i-Raman Prime can be battery-operated for easy portability, providing research-grade Raman analysis capabilities for high-precision qualitative and quantitative work wherever needed. The system is optimized for use with our STRaman<sup>®</sup> technology for analyses through non-transparent packaging.

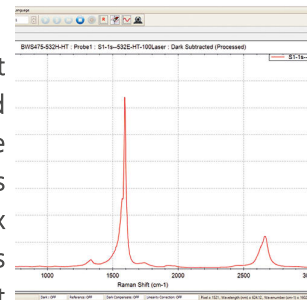
BWS475-532H-HT

Below, the accessories are grouped into Scope of delivery and Optional accessories.  
Please keep this printout at hand for ordering replacement material.  
These lists may be subject to change.

Scope of delivery BWT-840000673

| Qt.   | Order no. | Description                                                                                                                                                                                                                                                                                  |
|-------|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 PCS | 607510080 | High Throughput Lab-grade Raman Probe (532 nm)<br><br>High-throughput lab-grade fiber optic Raman probe assembly with trigger button. 1.5 meter fiber length.<br><br>Compatible with i-Raman NxG 532.<br> |
| 1 PCS | 607510040 | Polystyrene Validation Cap<br><br>Validation cap with integrated polystyrene standard for lab-grade Raman probes with shaft diameter of 9.5 mm.<br>                                                      |
| 1 PCS | 607510070 | Laser Safety Goggles, 532 nm wavelength<br><br>Laser Safety Goggles, 532 nm Wavelength.<br>                                                                                                             |

BWSpec<sup>®</sup> is B&W Tek's general spectroscopy software for instrument control and data acquisition, including real-time peak analysis and trending. BWSpec is the operating software included with the purchase of all B&W Tek portable Raman systems and spectrometer products. It is designed with features for broad range applications, performing complex measurements and calculations at the click of a button. It supports multiple data formats and provides the option to optimize measurement parameters, such as integration time and laser output power control. In addition to data acquisition and data processing, it also offers automatic dark removal, spectral smoothing, baseline correction, as well as peak monitoring and trending.



Carrying Case for i-Raman Pro and Prime series. Includes a soft, black carrying case with wheels and custom-cut foam for packing and safely carrying the i-Raman Pro, i-Raman Prime, STRam, or QTRam.

CCRM

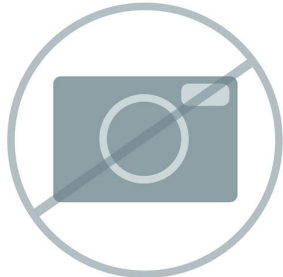
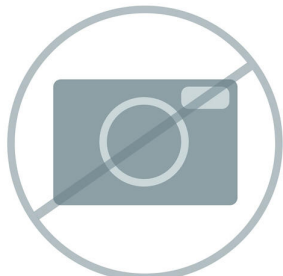
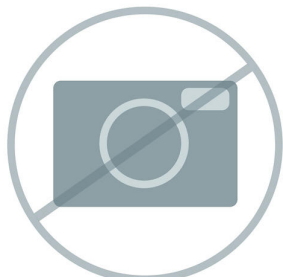


Stylus/pen combo for touch screens.

NR-STY

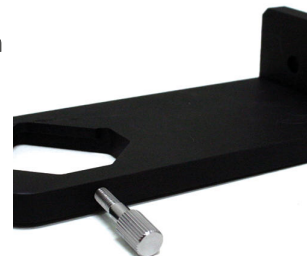


## Optional accessories

| Order no.     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                       |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| BWT-840001204 | Hastelloy immersion shaft for 532nm Raman probe<br><br>RIS100-HS-532-08: Hastelloy immersion shaft for BAC102/BAC100B Raman probes with excitation wavelength 532 nm. Features a 0.5" (12.7 mm) O.D. x 8" (203.2 mm) L Hastelloy C-276 shaft and a gold- sealed sapphire ball lens. Working distance 0.4 mm in air, 0.6 mm in water. Shaft operating temperature is up to 250 degrees C, pressure up to 4000 psi. Shaft must be purchased with B&W Tek Raman probe.<br><br>RIS100-HS-532-08 |    |
| BWT-810000719 | Power cord for EU power for use with portable Raman systems<br><br>Power cord for EU power for use with portable Raman systems.<br><br>BWPC-EU                                                                                                                                                                                                                                                                                                                                              |   |
| BWT-810000468 | Connection cleaner<br><br>Cleaner for SMA905 and FC/PC connections.                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
| BWT-810000469 | Cleaner for ferrule end surfaces<br><br>FC/PC and FC/APC receptacle cleaner recommended for i-Raman Pro /Prime, STRam, QTRam. Do not use on SMA.<br><br>FRC                                                                                                                                                                                                                                                                                                                                 |  |

BWT-810000623 Microscope head tripod adaptor

BAC151x-TRI tripod adapter for the BAC151x sampling system with Raman video microscope.



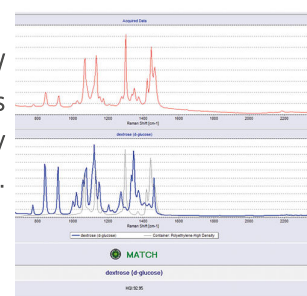
BWT-840000117 Raman Flow Cell (BAC160-SS)

Raman flow-through cell made of stainless steel, for inline Raman measurements of liquid samples by interfacing with standard laboratory probe (9.5 mm diameter; probe is not included in scope of delivery).



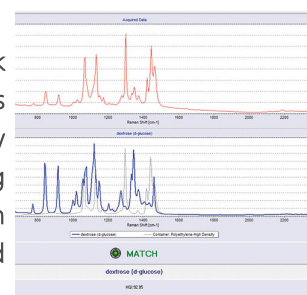
BWT-840000126 BWID Standard Raman ID Software

Data acquisition, material identification and reporting software for B&W Tek portable Raman spectrometers to rapidly identify or verify materials based on user-built libraries, proprietary B&W Tek and third-party libraries. Includes system performance tests. One user license provided. Free upgrades included within one year of purchase date.



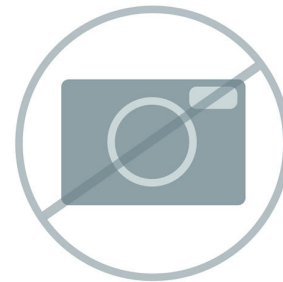
BWT-840000127 BWID Pharma Raman ID Software

Data acquisition and material identification software for B&W Tek portable Raman spectrometers to rapidly identify or verify materials based on user-built libraries, proprietary B&W Tek and third-party libraries. Meets all the requirements of FDA 21 CFR Part 11, including system access security, audit trail of data activities, and system performance tests. One user license provided. Free upgrades included within one year of purchase date.



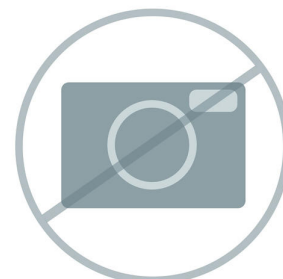
BWT-840000130 Immersion shaft for portable Raman instruments

Optional immersion shaft for BAC100/BAC102 Raman probes with an excitation wavelength of 532 nm or 785 nm. Equipped with a 76.2 mm long body made of 316L stainless steel with an outer diameter of 12.0 mm and a silica window that is sealed with an O-ring made of perfluoro rubber. Operating distance 5.0 mm in air. Can be used at -55 °C to 200 °C. The seal is liquid-tight at low pressure ( 1 bar).



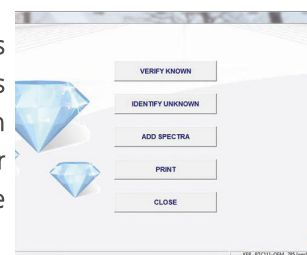
BWT-840000131 Immersion shaft for portable Raman instruments

Optional immersion shaft for BAC100/BAC102 Raman probes with an excitation wavelength of 532 nm or 785 nm. Equipped with a 76.2 mm long body made of 316L stainless steel with an outer diameter of 12.0 mm and a sapphire-glass window that is sealed with an O-ring made of perfluoro rubber. Operating distance 5.0 mm in air. Can be used at -55 °C to 200 °C. The seal is liquid-tight at low pressure ( 1 bar).



BWT-840000280 GemID Software

Data acquisition and identification software for the analysis of gemstones and minerals with B&W Tek portable Raman spectrometers. Includes Raman Spectral Library and images of more than 450 gemstones from Gem Expert and Japan Germany Gemmological Laboratory. One user license provided. Free upgrades included within one year of purchase date.



BWT-840000295 Vials for liquids, 15 mm in diameter

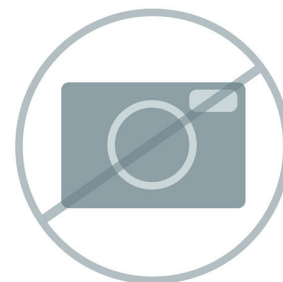
Borosilicate glass vials (diameter 15 mm), package of 6, with pouch.



BWT-840000322 Video Microscope Objective, 10x

Microscope objective, infinity-corrected, 10x, working distance (mm) = 16, focal length (mm) = 20, numerical aperture (NA) = 0.3.

RML110A

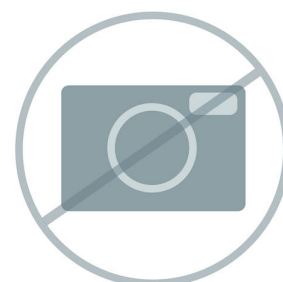


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BWT-840000323 Video Microscope Objective, 20x (RML120A)

Microscope objective, infinity-corrected, 20x, working distance (mm) = 12, focal length (mm) = 10, numerical aperture (NA) = 0.4.

RML120A

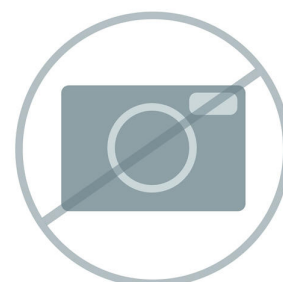


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BWT-840000325 Video Microscope Objective, 50x (RML150A)

Microscope objective, infinity-corrected, 50x, working distance (mm) = 9.15, focal length (mm) = 4, numerical aperture (NA) = 0.55.

RML150A

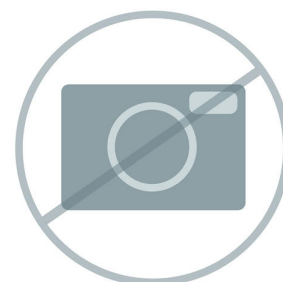


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BWT-840000328 Video Microscope Objective, 100x

Microscope objective, infinity-corrected, 100x, working distance (mm) = 3.2, numerical aperture (NA) = 0.8, Focal length (mm) = 2.

RML1100A





BWT-840000332 Tablet Holder

Tablet holder compatible with all models of BAC100/BAC102 lab-grade fiber-optic Raman probe with 9.5 mm shaft diameter.



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BWT-840000361 Handheld Laser Power Meter

Laser Power Meter, Pen Type, Calibrated. Range: 5 micro-Watts to 1 Watt. Used in OQ/PQ and annual certification laser power measurement.



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BW840000463 BAC151x probe adapter

BAC151x Probe Adaptor to connect B&W Tek Lab grade Raman probes to BAC151x Video microscope sampling system. Remove the standard shaft and distance regulator, to use the adaptor and connect the probe head to the video microscope. 3 adaptors per pack.



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BWT-840000529 Raman Replacement Shaft (532 nm)

Replacement shaft for BAC100/102-532 Raman probe module made of standard stainless steel. Replacement shaft with adhesive-sealed fused-silica window. Working distance 5.4 mm. Shaft diameter 9.5 mm, shaft length 76.2 mm.





BWT-840000679 Raman Zoom Lens (20-60 mm)

Zoom lens for our BAC100/BAC102 fiber-optic Raman probes. Working distance is adjustable from 20 mm to 60 mm. Suitable for a Raman excitation range from 500 nm to 850 nm.



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BWT-840000680 Raman Zoom Lens (60-600 mm)

Long-working-distance zoom lens for BAC100/BAC102 fiber-optic Raman probes. Working distance is adjustable from 60 mm to 600 mm. Suitable for a Raman excitation range from 500 nm to 850 nm.



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BWT-840000681 Raman Stand-off Lens (0.6-6 m)

A telescope Stand-off lens for BAC100/BAC102 fiber-optic Raman probes. Wide zoom range for sample measurement ranges from 0.6 meters to 6 meters. Suitable for a Raman excitation range from 500 nm to 850 nm.



RTS202-VIS-NIR

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BWT-840000843 Raman Gemstone Spectral Library

Raman Gemstone Spectral Library for BWID and portable Raman instruments with > 450 spectra from Gem Expert and from Japan Germany Gemmological Laboratory. Library supported in BWID Version 2.02 or higher.



Raman Explosives Spectral Library for portable Raman instruments including more than 180 spectra. Supported in BWID Version 2.02 and higher.

Note: This item may be subject to Export control to some territories.



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**BWT-840000962 Raman Video Micro-Sampling System (532 nm)**

Video microscope sampling system for use with B&W Tek's lab and industrial Raman probes. Includes a 20x objective with a working distance of 16 mm. Offers manual rough and fine adjustment on the X, Y, and Z-axes, coaxial LED illuminator for target alignment, video camera for sample observation, and is compatible with standard microscope objectives. Probe not included, available separately. 532 nm configuration.

BAC151C-532



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**BWT-840000963 Raman Video Micro-Sampling System (532/785 nm dual)**

Video microscope sampling system for use with B&W Tek's lab and industrial Raman probes. Includes a 20x objective at a working distance of 16 mm. Offers manual rough and fine adjustment on the X, Y and Z-axes, coaxial LED illuminator for target alignment, video camera for sample observation, and is compatible with standard microscope objectives. Probe not included, available separately. Dual 532/785 nm configuration.

BAC151C-532/785



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**BWT-840000965 Raman Video Micro-Sampling Head (532 nm)**

Video microscope sampling system head for use with B&W Tek's lab and industrial Raman probes. With coaxial LED illuminator for target alignment and video camera for sample observation. Compatible with standard microscope objectives. Probe not included, available separately. Objective lens not included, available separately. 532 nm configuration.



BWT-840000966 Raman Video Micro-Sampling Head (532/785 nm dual)

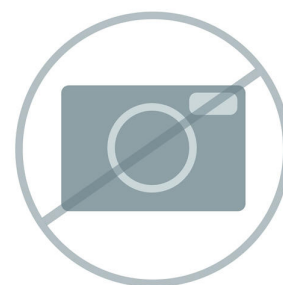
Video microscope sampling system head for use with B&W Tek's lab and industrial Raman probes. With coaxial LED illuminator for target alignment and video camera for sample observation. Compatible with standard microscope objectives. Probe not included, available separately. Objective lens not included, available separately. Dual 532/785 nm configuration.



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BWT-840001123 Bluetooth 1D barcode scanner

Bluetooth 1D barcode scanner for use with BWID software operating a portable Raman instrument



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BWT-810000682 External rechargeable battery pack for portable Raman instruments

External Lithium-Ion battery that provides constant 12 VDC. (Compatible with the i-Raman-Plus, i-Raman Pro and i-Raman EX models).

EBP106



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BWT-840001137 Vision 4.1

Vision is data acquisition and method development software solution for spectroscopic analysis and control of B&W Tek portable Raman instruments, Metrohm XDS laboratory and process NIRS instruments. A user-friendly graphical analysis interface enables a simple application of chemometric algorithms for creating identification, qualification, and quantification methods and running them in real-time. With Vision you can store, manage, reprocess and exchange data.



Vision Pharma is data acquisition and method development software solution for spectroscopic analysis and control of B&W Tek portable Raman instruments, Metrohm XDS laboratory and process NIRS instruments. A user-friendly graphical analysis interface enables a simple application of chemometric algorithms for creating identification, qualification, and quantification methods and running them in real-time. With Vision you can store, manage, reprocess and exchange data. Vision Pharma is compliant with the US FDA's 21 CFR Pt 11 regulations for electronic signatures and records.



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BWT-840000296 Stylus/pen

Stylus/pen combo for touch screens.

NR-STY



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BWT-840001265 BWID Comprehensive Raman Library

BWID Metrohm Comprehensive RamanLibrary - More than 27,700 spectral entries of chemicals, minerals, organic chemicals, solvents, polymers, dyes and pigments, TICs, TIMs, inorganics and organometallics, personal care products, and illicit materials.

PTL-MCRL



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BWT-840001305 BWID MCRL - Polymers and Polymer Additives

Metrohm Comprehensive Raman Library (MCRL) Polymers and Polymer Additives for BWID.



BWT-840001309 BWID MCRL - Dyes, Pigments, and Stains

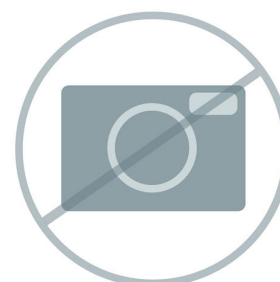
Metrohm Comprehensive Raman Library (MCRL) Dyes, Pigments, and Stains for BWID.



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BWT-840001254 BWID Illicit and General Chemicals Library

BWID library of illicit materials includes drugs, TICs, TIMs, precursors, and general chemicals.



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BWT-840001255 BWID CWA Library

Raman Chemical Warfare Agent (CWA) Library for BWID.



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BWT-840001264 BWID Comprehensive USP Raman Library

Metrohm Comprehensive USP Raman Library for BWID containing ~ 900 traceable certified items.

