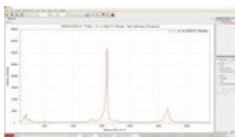







Accessories for BWT-840000674

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-840000674

Qty.	Order no.	Description	
1 pcs	BWT-810000044	BWSpec Software	 <p>BWSpec® 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.</p>
1 pcs	BWT-810000721	i-Raman Series Carrying Case	 <p>Storage/Carrying Case for i-Raman series systems. Includes a padded black carrying case on wheels with custom cut foam inserts for packaging and safely carrying the portable i-Raman series systems.</p>
1 pcs	BWT-840000101	Laser safety goggles (785 nm)	 <p>Laser safety goggles for 785 nm lasers – suitable only for Class IIIB laser systems from B&W Tek.</p>
1 pcs	BWT-840000983	High-Throughput Raman Trigger Probe (532 nm)	 <p>Module with laboratory-grade light-guide Raman trigger probe for high throughput. Cut-on-Start from 65 cm^{-1}, $105 \mu\text{m}$ diameter, 0.22 NA fiber for excitation at 532 nm, $300 \mu\text{m}$ diameter, 0.22 NA for Raman pickup, optical density > 6. 1.5 m fiber cable with FC/PC connector on the spectrometer end and FC/PC connector on the laser end. Adhesive sealed quartz window for non-contact sampling. 5.4 mm working distance. Not for immersive use. This probe is compatible with i-Raman Prime Series 532 only, also with the Carbon Raman Analyzer.</p>

Optional accessories

Order no.	Description	
BWT-810000389	Raman Cuvette Holder – 9.5 mm	
	<p>The BCR100A Raman cuvette holder allows you to easily measure the Raman spectrum of liquids and powders by interfacing a Raman probe to the holder. This accessory uses an internal mirror with a three point precision locking mechanism for unmatched reproducibility, increasing the Raman signal up to 3x higher than standard cuvette holders. It is designed so that the probe shaft does not directly contact the cuvette and includes a light trap to reduce background fluorescence. The BCR100A is available in model versions for probes with a diameter of 9.5 mm or 12 mm and can be used with any standard cuvette of 12.5 mm x 12.5 mm outer diameter (1 cm path length) for sampling liquids or powders.</p>	
BWT-810000468	Connection cleaner	
	<p>Cleaner for SMA905 and FC/PC connections.</p>	
BWT-810000469	Cleaner for ferrule end surfaces	
	<p>Cleaner for FC/PC and FC/APC plugs.</p>	
BWT-810000501	Microscope adapter: 785 nm wavelength	
	<p>Microscope adapter compatible with Olympus BX53, BX51 with U-5RE-2 nosepiece. For fiber delivery of laser excitation and collection of Raman signals. The adaptor is fitted with a 3/8" shaft. Compatible with B&W Tek's laboratory-quality BAC100/102-785 Raman fiber-optic light guide probe. Probe not included in scope of delivery.</p>	
BWT-810000542	Raman Cuvette Holder – 12 mm	
	<p>The BCR100A Raman cuvette holder allows you to easily measure Raman spectrum of liquids and powders by attaching a Raman probe to the holder. This accessory uses an internal mirror with a three point precision locking mechanism for unmatched reproducibility, increasing the Raman signal up to 3x higher than standard cuvette holders. It is designed so that the probe shaft does not directly contact the cuvette and includes a light trap to reduce background fluorescence. The BCR100A is available in model versions for probes with a diameter of 9.5 mm or 12 mm and can be used with any standard cuvette with 12.5 mm x 12.5 mm outer diameter (1 cm path length) for sampling liquids or powders. BCR100A-12 mm cuvette holder for liquid samples for use with the RIS100 series shaft with 12 mm diameter. Probe not included in scope of delivery.</p>	

BWT-810000589 BWIQ: Multivariate Analysis Software

BWIQ® is a comprehensive software package for multivariate analysis of spectral data, including explorative, qualitative analyses and quantitative regression methods. BWIQ supports the classical chemometric methods of classification and regression, including among them Partial-Least-Squares-Regression (PLS), principal component analysis (PCA) and discriminant analysis with Support-Vector-Machine-Algorithms (SVM) for non-linear data sets. It features an intuitive workflow from data import to evaluation, with extensive graphics to support model analysis and interpretation. BWIQ includes preprocessing tools for optimal analysis of Raman, NIR, LIBS and other spectroscopic data sets. The BWIQ chemometrics model is used with QTRam®. It is the ideal chemometrics package for online use with the instruments of the i-Raman® series for real-time evaluation and analysis of high-resolution spectroscopy data.



BWT-810000623 Microscope head tripod adaptor

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



BWT-810000879 Software Development Kit for Instrument Control

Software Development Kit for Windows operating systems supports all USB spectrometers and Cleanlaze lasers made by B&W Tek. Includes product manual, DLL drivers and sample code for LabView®, Visual C++, C++ Builder, C#, Visual Basic, VBA and VB.NET.



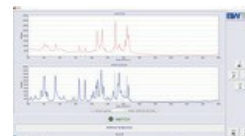
BWT-840000117 Raman Flow Cell

Raman flow-through cell made of stainless steel, for inline Raman measurements of liquid samples (Probe is not included in scope of delivery).



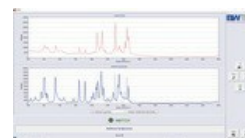
BWT-840000126 BWID Standard Raman ID Software

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 Portable Raman immersion shaft

Optional immersion shaft for BAC100/BAC102 Raman probes with a stimulation wavelength of 532 nm or 785 nm. Equipped with a 76.2 mm long body made of 316L special 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 Portable Raman immersion shaft

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 special 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-840000136 Raman replacement shaft (785 nm)

Replacement shaft for BAC100/102-785 Raman probe assembly made of stainless steel. Replaceable shaft with adhesive sealed fused silica window. Operating distance 5.5 mm. Shaft diameter 9.5 mm, shaft length 76.2 mm.



BWT-840000164 Complete Raman Library (portables)

Raman Spectral Library: Complete Collection (without minerals and precious stones) for use with BWID software; 15,930 spectra.



BWT-840000165 Raman Polymers Library

Raman Spectral Library of Polymers and Polymer Additives (portables) for use with BWID software; 3,412 spectra.



BWT-840000166 Raman Spectral Library for the Food Industry

Raman Spectral Library of Food Additives and Packaging (portables) for use with BWID software; 2,451 spectra.



BWT-840000167 Raman Solvents Library

Raman Spectral Library of Solvents (portables) for use with BWID software; 1,003 spectra.



BWT-840000168 Raman Biochemicals Library

Raman Spectral Library of Biochemicals (portables) for use with BWID software; 4,359 spectra.



BWT-840000169 Raman Aldehydes and Ketones Library

Raman Aldehydes and Ketones Library (portables) for use with BWID software; 2,106 spectra.



BWT-840000170 Raman Alcohols and Phenols Library

Raman Alcohols and Phenols Spectral Library (portable instruments) for use in the BWID software; 1,661 Spectra.



BWT-840000171 Raman Esters, Lactones, and Anhydrides Spectral Library

Raman Esters, Lactones, and Anhydrides Spectral Library (portable instruments) for use in the BWID software; 3,776 Spectra.



BWT-840000172 Raman Hydrocarbons Spectral Library

Raman Hydrocarbons Spectral Library (portable instruments) for use in the BWID software; 576 Spectra.



BWT-840000173 Raman Flavors, Fragrances and Cosmetic Ingredients Spectral Library

Raman Flavors, Fragrances and Cosmetic Ingredients Spectral Library (portable instruments) for use in the BWID software; 2,336 Spectra.



BWT-840000174 Raman Pesticides Spectral Library

Raman Pesticides Spectral Library (portable instruments): for use in the BWID software; 1,685 Spectra.



BWT-840000175 Raman Semiconductor Chemicals Spectral Library

Raman Semiconductor Chemicals Spectral Library (portable instruments): for use in the BWID software; 921 Spectra.



BWT-840000177 Raman Dyes, Pigments and Stains Spectral Library

Raman Dyes, Pigments and Stains Spectral Library (portable instruments) for use in the BWID software; 1,364 Spectra.



BWT-840000178 Raman Sulfur and Phosphorous Chemicals Library

Raman Sulfur and Phosphorous Chemicals Spectral Library (portable instruments) for use in the BWID software; 2,116 Spectra.



BWT-840000179 Raman Hazardous Chemicals Spectral Library

Raman Hazardous Chemicals Spectral Library (portable instruments) for use in the BWID software; 4,043 Spectra.



BWT-840000180 Raman Toxic Chemicals Spectral Library

Raman Toxic Chemicals Spectral Library (portable instruments) for use in the BWID software; 1,932 Spectra.



BWT-840000181 Raman Pharmaceuticals, Drugs and Antibiotics Library

Raman Pharmaceuticals, Drugs and Antibiotics Spectral Library (portable instruments) for use in the BWID software; 2,902 Spectra.



BWT-840000182 Raman High-Production Volume Chemical Spectral Library

Raman High Production Volume (HPV) Chemicals Spectral Library (portable instruments) for use in the BWID software; 1,293 Spectra.



BWT-840000183 Raman Excipients Spectral Library

Raman Excipients (all from 60020) Spectral Library (portable instruments): for use in the BWID software; 826 Spectra.



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-840000287 Vial Holder Adapter

Vial holder adapter for use with the BAC100/BAC102 lab-grade Raman Probe with 9.5 mm shaft diameter. Compatible with vials with a diameter of 15 mm. Shipped with 6 vials made from borosilicate glass (15 mm).



BWT-840000289 Portable Raman Instrument Validation Cap

Validation Cap with integrated ASTM-standard polystyrene for use with the BAC100/BAC102 lab-grade Raman Probe with shaft diameter of 9.5 mm.



BWT-840000295 Vials for liquids, 15 mm in diameter

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



BWT-840000296 Stylus/pen

Stylus/pen combo for touch screens.



BWT-840000321 Video Microscope Objective, 5X

Microscope Objective, Infinity-Corrected, 5X, Working Distance (mm) = 26.1, Focal Length (mm) = 39.7, Numerical Aperture (NA) = 0.12.



BWT-840000322 Video Microscope Objective, 10X

Microscope Objective, Infinity-Corrected, 10X, Working Distance (mm) = 20.2, Focal Length (mm) = 20.1, Numerical Aperture (NA) = 0.25.



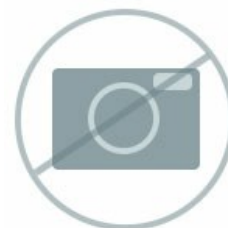
BWT-840000323 Video Microscope Objective, 20X

Microscope Objective, Infinity-Corrected, 20X, Working Distance (mm) = 8.8, Focal Length (mm) = 10, Numerical Aperture (NA) = 0.4.



BWT-840000324 Video Microscope Objective, 40X

Microscope Objective, Infinity-Corrected, 40X, Working Distance (mm) = 3.89, Focal Length (mm) = 4.989, Numerical Aperture (NA) = 0.6.



BWT-840000325 Video Microscope Objective, 50X

Microscope Objective, Infinity-Corrected, 50X, Working Distance (mm) = 3.68, Focal Length (mm) = 4, Numerical Aperture (NA) = 0.7.



BWT-840000326 Video Microscope Objective, 60X

Microscope Objective, Infinity-Corrected, 60X, Working Distance (mm) = 3.18, Focal Length (mm) = 3.3, Numerical Aperture (NA) = 0.75.



BWT-840000327 Video Microscope Objective, 80X

Microscope Objective, Infinity-Corrected, 80X, Working Distance (mm) = 1.25, Focal Length (mm) = 2.495, Numerical Aperture (NA) = 0.8.



BWT-840000328 Video Microscope Objective, 100X

Microscope Objective, Infinity-Corrected, 100X, Working Distance (mm) = 0.4, Numerical Aperture (NA) = 0.85.



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.



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.



BWT-840000395 Raman Probe Holder

Probe holder for use with B&W Tek's lab-grade Raman probes. Provides manual coarse and fine XYZ adjustments.



BWT-840000463 BAC151x probe adapter

BAC151x Probe Adapter to connect B&W Tek lab-grade Raman probes to the BAC151x Video microscope sampling system. 3 adapters per package.



BWT-840000506 Slide-mounted SERS substrate (package of 5)

SERS substrate (5 mm x 5 mm) conveniently mounted to a glass microscope slide for enhanced Raman measurement. Optimized for 785 nm excitation. Package of 5



BWT-840000507 Slide-mounted SERS substrate (package of 10)

SERS substrate (5 mm x 5 mm) conveniently mounted to a glass microscope slide for enhanced Raman measurement. Optimized for 785 nm excitation. Package of 10.



BWT-840000508 Slide-mounted SERS substrate (package of 25)

SERS substrate (5 mm x 5 mm) conveniently mounted to a glass microscope slide for enhanced Raman measurement. Optimized for 785 nm excitation. Package of 25.



BWT-840000509 Slide-mounted SERS substrate (package of 50)

SERS substrate (5 mm x 5 mm) conveniently mounted to a glass microscope slide for enhanced Raman measurement. Optimized for 785 nm excitation. Package of 50.



BWT-840000531 Raman Organometallics & Silicon Spectral Library

Raman Organometallics & Silicon Spectral Library (portable instruments) for use in the BWID software; 981 Spectra.



BWT-840000532 Raman White Powders Spectral Library

Raman White Powders Spectral Library (portable instruments) for use in the BWID software; 305 Spectra.



BWT-840000533 Raman Coatings Spectral Library

Raman Coatings Spectral Library (portable instruments): for use in the BWID software; 652 Spectra.



BWT-840000534 Raman Paints Spectral Library

Raman Paints Spectral Library (portable instruments): for use in the BWID software; 1077 Spectra.



BWT-840000535 Raman Environmental Pollutants Spectral Library

Raman Environmental Pollutants Spectral Library (portable instruments): for use in the BWID software; 361 Spectra.



BWT-840000536 Raman Essential Oils Spectral Library

Raman Essential Oils Spectral Library (portable instruments) for use in the BWID software; 401 Spectra.



BWT-840000537 Raman Spectral Library of Minerals

Raman Minerals Spectral Library (portable instruments): for use in the BWID software; 459 Spectra.



BWT-840000538 Raman Inorganic Spectral Library

Raman Inorganic Spectral Library (portable instruments): for use in the BWID software; 1,432 Spectra.



BWT-840000583 Manual Raman Video Sampling Tripod

The portable Raman tripod accessory is a light and flexible, stabilized tripod that gives users the ability to mount the BAC151x microscope head to take measurements in hard to reach places. The tripod has manual fine XYZ positioning and can be easily adjusted for different environments and spaces. Does not include BAC151x head. Adaptor included.



BWT-840000591 Raman Chemicals Spectral Library

Raman Chemicals Spectral Library for portable Raman instruments, with around 1,150 spectra of common chemicals, narcotics, explosives, solvents and plastics. Supported in BWID Version 2.02 and higher.



BWT-840000604 Raman Needle Probe (785 nm)

Miniature contact Raman probe for hard-to-reach places. Single 200 μm core laser fiber for 785 nm excitation, surrounded by 9x 200 μm core collection fibers, encased in a 3 mm OD, 150 mm long SS tube. Distal end of the collection fibers aligned in linear array with SMA905 connector, and laser fiber with FC/PC connector. Fiber cable, length 1.5 m, Rayleigh rejection at $>\text{OD}3$. Raman Cut-off at 500 cm^{-1} .



BWT-840000609 Enclosure for Raman sampling system

Enclosure for Raman sampling system (i.e. microscope, probe holder) used to eliminate direct ocular and/or skin exposure from the laser emission. The enclosure is ergonomically designed to facilitate sample loading and system operation. For use with 532, 785 and 1064 nm wavelengths.



BWT-840000642 Motorized Raman Video Sampling stand

The motorized portable Raman stand is a flexible stabilized tripod that gives users the ability to mount the BAC151x microscope head to take measurements in hard-to-reach places.



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.



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.



BWT-840000681 Raman Zoom Lens (0.6-6 m)

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



BWT-840000711 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 785 nm to 1064 nm.



BWT-840000712 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 785 nm to 1064 nm.



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.



BWT-84000847 Raman Explosives Spectral Library

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.



BWT-84000848 Raman Chemicals and Narcotics Spectral Library

Raman Chemicals Spectral Library for portable Raman instruments, with more than 1,100 spectra of common and toxic chemicals, narcotics, solvents and plastics. Supported in BWID Version 2.02 and higher.



BWT-84000849 All-Inclusive Raman Library Bundle

All-Inclusive Raman Library Bundle for portable Raman instruments (includes all Raman Spectra); 16,989 Spectra for use in the BWID software.



BWT-84000850 Raman Petrochemicals Spectral Library

Raman Petrochemicals Spectral Library for use in the BWID software; 749 Spectra.



BWT-84000905 High-Throughput Industrial Raman Probe (785 nm)

High-throughput industrial Raman immersion probe with 316 stainless steel shaft (0.5" outer diameter x 8" length) and epoxied sapphire objective. Excitation at 785 nm. Raman cut-off at 150 cm^{-1} . Laser fiber 105 μm core FC/PC connector. Raman fiber 300 μm core FC/PC connector. fiber cable, length 1.5 m.



BWT-84000910 STRam Probe

Lab-grade Raman fiber-optic probe module for analyses through packaging, with hand trigger, 105 μm diameter, 0.22 NA fiber for 785 nm excitation, 300 μm diameter, 0.22 NA for Raman pickup, optical density >6 ; up to 150 cm^{-1} . 1.5 m fiber cable with FC/PC connector on the spectrometer end and FC/PC connector on the laser end. Adhesive sealed quartz window. Not for immersive use. Accessories included: Focus adapter, surface regulator, calibration cap.



BWT-84000961 Raman Video Micro-Sampling System (785 nm)

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 8.8 mm. Offers manual coarse 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. 785 nm configuration.



BWT-84000963 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 8.8 mm. Offers manual coarse 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.



BWT-84000964 Raman Video Micro-Sampling Head (785 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. 785 nm configuration.



BWT-84000966 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.

