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RAMAN BUILDING BLOCK 1064

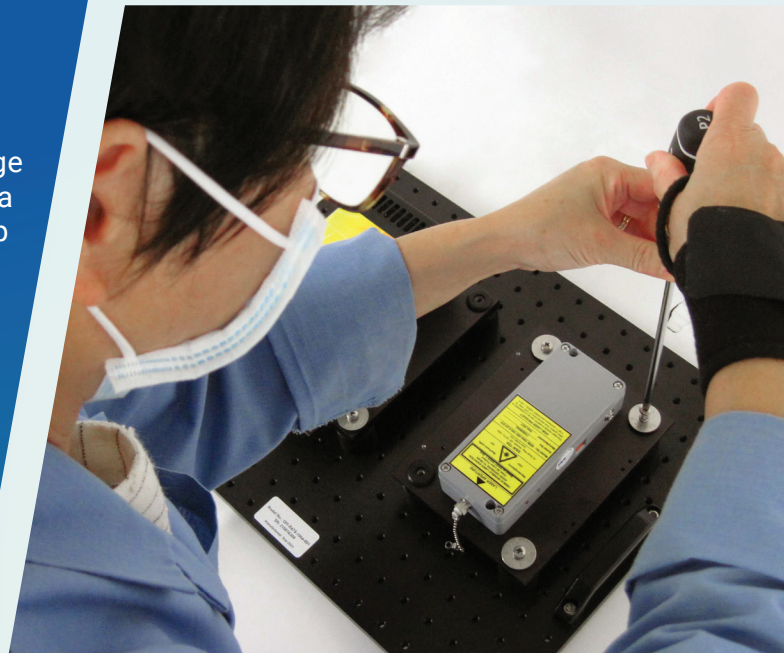
Thinking out of the box? Let us meet your needs!

Introducing a one of a kind opportunity to build and fully customize your own spectrometer system. Take advantage of our high quality manufacturing capabilities, and setup a spectrometer system using our unique flexible OEM setup that will satisfy all your unique ideas. Our OEM modular setup is designed to keep up with all your application and performance demands as you Discover It Yourself.

A RAMAN BUILDING BLOCK 1064 is comprised of the following necessary components: a spectrometer, a 1064 nm laser, a sampling probe, and other optional accessories. Choose the options to build the breadboarding system most suitable for your needs.

High-quality and precise parts for all your prototyping needs

- ★ Building Blocks are fully customizable and adaptable to your requests
- ★ Fiber-optic probe with External Trigger and Sampling Flexibility
- ★ Patented CleanLaze® Technology for laser stabilization, Customizations available



B&W Tek offers both BWSpec® software and Software Development Kit (SDK) packages enabling solutions suited for Raman applications.

BWSpec®

BWSpec® is a spectral data acquisition software, which is a foundation for all B&W Tek instruments. This software includes a wide range of tools that are designed to perform basic measurements and calculations at the click of a button. It offers multiple data formats and gives users the ability to optimize acquisition parameters, such as integration time and laser power. This also includes automatic dark removal, and manual/auto baseline correction.

Software Development Kit (SDK)

SDKs allow users to control B&W Tek spectroscopic instruments through their own customized interfaces. Basic laser and spectrometer control for data acquisition, calibration and module synchronization is possible. The SDK package is designed for 32 and 64-bit windows operating system and available for all our USB-based spectrometers.

Advanced packages with data processing algorithms and chemometric model support (models from BWIQ software) are available for full system control. The math functions for data processing include curve fitting, peak finding, smoothing, and a prediction engine, delivering a full solution spectrometer system.

Sample Applications



Bioscience and Medical Diagnosis
Characterize biosystems; develop diagnostic methods

Pharmaceutical
Development, identification and verification of raw materials and more...



Raman Microscopy
Investigate microsamples



Geology and Mineralogy
Material production and identification



Custom Device Diagnosis
Feasibility studies and prototypes



Research and Development
Fully customizable uses for R&D and proof of concept use



We have prepared one starter Building Block breadboard for our 1064 nm laser excitation category. Each building block is setup and selected by our excellent engineers with the highest quality parts. Each block is designed to help you discover the most efficient and precise methods to achieve your goals.

Starter Block

Spectrometer Options

Excitation Wavelength	1064 nm
Raman Shift Coverage	100 – 2500 cm^{-1}
Note: The start range of Raman shift is dependent on the selected probe	
Coverage Range	1047 nm to 1450 nm
Resolution	10 cm^{-1} @ 1296 nm
Detector Type	Linear InGaAs Array
Thermoelectric Cooling	-20° C @ relative humidity $\leq$ 90%
Dimensions	163 mm $\times$ 93.6 mm $\times$ 67.8 mm (6.4" $\times$ 3.7" $\times$ 2.7")
Weight	2.8 lbs. (~1.25 kg)

For more spectrometer model customization options, datasheets, and price information please contact us

Laser Options

BRM-1064-450-100-22-DIY

Power Options: Standard offered is 450mW

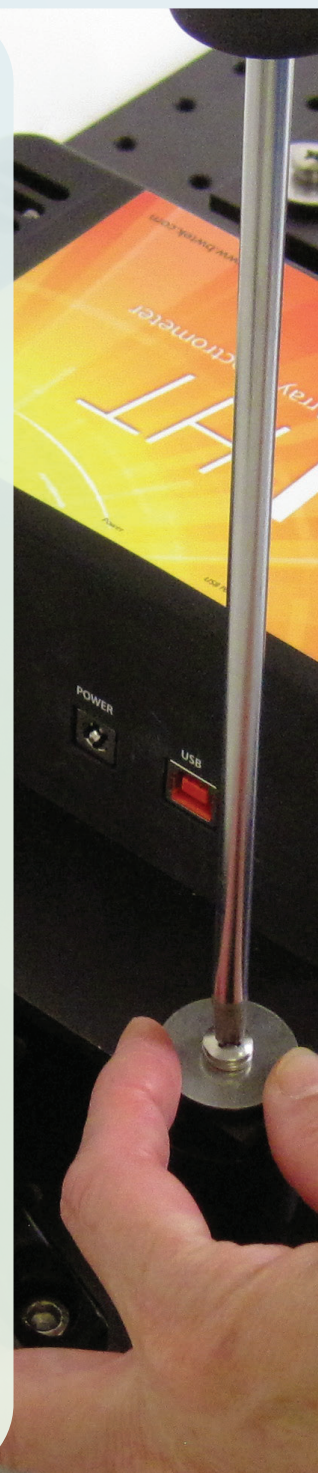
Note: The 1064 nm laser product is built as per the specifications of the customer and sold solely as a component (or a module) to incorporate into other equipment. The purchaser assumes responsibility to comply with US FDA21 CFR 1040 with regard to the use of this laser and its introduction into commerce.

Probe Options

Lab-Grade

Model Number	BAC100B-1064-HT
Excitation Wavelength	1064 nm
Laser Blocking	OD6 Default
Shaft Material	304 Stainless Steel
Shaft Length	76.2 mm (3")
Shaft Diameter	9.4 mm (.37")
Working Distance	5.9 mm
Maximum Operating Temperature	80° C; Non-immersive use

For more probe or laser customization options, datasheets, and price information please contact us



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