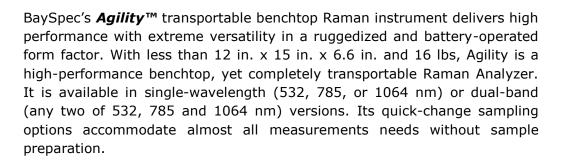


## Dual-band Transportable Benchtop Raman Instrument

#### **Applications:**

- In-situ chemical analysis
- In-line monitoring
- Biomedical research
- Pharmaceuticals
- Material science
- Forensic labs
- Semiconductors
- Geological
- Fluorescence suppression using 1064 nm Raman



### **Key Features**

- Transportable, battery-powered system enables chemical analysis on the field.
- The most versatile sampling options for vastly different sample conditions.
- Dispersive 1064 nm Raman delivers best signal for samples with photoilluminance.
- Single-wavelength or dual-wavelength. Dual-band configuration expands analytical power significantly.
- Laser output power is continuously adjustable by the software.
- **Agility**<sup>TM</sup> has no moving parts and has its sensitive optical engine shock-resistant mounted, resulting in a ruggedized instrument that has withstood the rigors of field testing.
- **Agility**<sup>TM</sup> is operated by BaySpec's Agile 20/20 software that has an intuitive, streamlined user interface. It can verify and identify substances automatically with BaySpec's, user-built or third-party spectral libraries.



Liquid-vial insert



Solid sample insert



Pill holder



Fiber probe adapter



Agility™ Raman analyzer



# Agility<sup>™</sup> Raman Analyzer

Pervasive Spectroscopy

# Dual-band Transportable Benchtop Raman Instrument

	Specification					
	Single-Wavelength			Dual-Band		
	Agility-532	Agility-785	Agility-1064	Agility-532/1064	Agility-785/1064	
OPTICAL						
Excitation Wavelength*	532 nm	785 nm	1064 nm	532 and 1064 nm	785 and 1064 nm	
Spectral Range*	200-3500 cm <sup>-1</sup>	100-2300 cm <sup>-1</sup>	100-2300 cm <sup>-1</sup>	200-3500 cm <sup>-1</sup> for 532 nm; 100-2300 cm <sup>-1</sup> for 785 and 1064 nm 9-12 cm <sup>-1</sup> for 532 nm; 6-9 cm <sup>-1</sup> for 785 nm;		
Resolution (FWHM)	9-12 cm <sup>-1</sup>	6-9 cm <sup>-1</sup>	12-17 cm <sup>-1</sup>	12-17 cm <sup>-1</sup> for 1064 nm		
Laser Power	50 mW max.	0-450 mW Adjustable	0-450 mW Adjustable	50 mW (max.) for 532 nm; 0-450 mW for 785 and 1064 nm		
Spectrograph	f/2; Transmission <i>Volume Phase Grating (VPG)</i> ®					
Integration Time	5 ms-600 s	5 ms-600 s	1 ms-20 s	5 ms-600 s for 532 and 785 nm; 1 ms-20 s for 1064 nm		
Wavelength Calibration			Automatic via s			
Detector Array	2048 px CCD	2048 px CCD	256 px InGaAs	2048 px CCD for 532 and 785 nm; 256 px InGaAs for 1064 nm		
Detector cooling	2 stage TE (cooling time < 1 min)					
PHYSICAL						
Dimensions (mm; in)	305 (d) x 380 (w) x 168 (h); 12 x 15 x 6.6					
Weight	14 lb 16 lb					
Operating Ranges	0 to 45°C; 0 to 95% RH					
ELECTRICAL						
A/D Converter	16 bit					
Power Consumption	< 25 W			< 30 W		
Battery	Lithium ion, 4 hr battery life, 6 hr charging time					
SAMPLING OPTIONS						
Fiber Probe	Coaxial, AR coated, filtered					
Liquid Sample Holder	Holds vials, tubes, cuvettes					
Pill Holder	Solid or liquid pills and capsules					
Solid Sample Holder			Upright or inverte	ed options		
COMPUTER						
Operating System	Windows-based (32 or 64 bit)					
System Control	Onboard touchscreen or external PC					
GUI	Agile 20/20 Windows XP/Vista/7					
Data Ports	USB 2.0					
Security	Tiered password structure (3 levels), event logging and reporting					
Internal Storage	16 GB					
Wireless Connectivity	WiFi (optional)					
Spectral Libraries	BaySpec Factory Library; User-defined; 3rd party options					

<sup>\*</sup> Contact us for custom laser wavelengths and spectral ranges.



 $\textit{Agility}^{\text{TM}}$  with fiber probe option