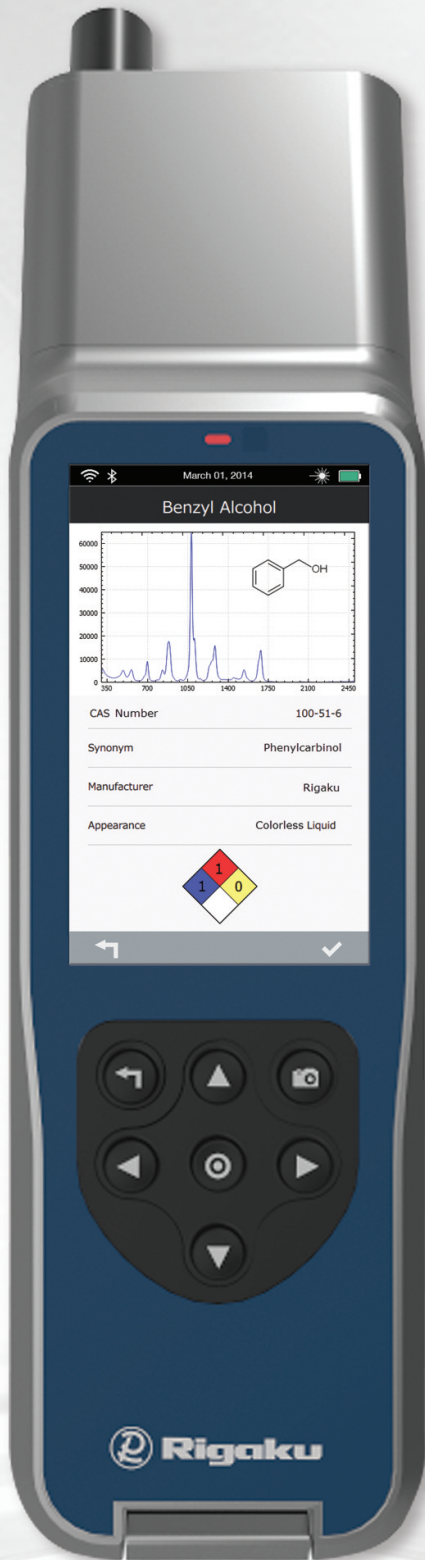


# Progeny™

The new generation in  
**handheld Raman analysis**  
that streamlines your  
material ID workflow.



From the evolution of handheld spectroscopy comes Progeny™ — the first handheld Raman analyzer designed to be customizable and flexible for seamless integration into any work environment. Now you can perform lab-quality analysis of the widest range of solids, powders, liquids, and other substances to ensure consumer safety around the globe.

By integrating Progeny into the development of new applications or adaptation to current workflows, you can expect the ability to:

- Accurately analyze your materials through packaging
- Minimize the learning curve with a smartphone-inspired interface
- Increase confidence in your material ID with unparalleled sensitivity
- Measure a wide range of materials with interference-free data
- Expand your data transfer flexibility (LIMS, wireless, and docking station)



[www.rigakuprogeny.com](http://www.rigakuprogeny.com)

Progeny provides the power of Raman spectroscopy in a handheld form with no compromises. Users are empowered to choose the complexity of the task at hand. Progeny's unique software design provides articulate communication of simple PASS/FAIL decision or more detailed analysis results — for a variety of applications in the lab, in the field or wherever data is needed.

<b>ERGONOMICS</b>		
Mode of Operation	Handheld, or benchtop using optional docking station	Efficiently identify raw materials at the point of need
Size	29.9cm x 8.1cm x 7.4cm (11.8in x 3.2in x 2.9in)	Allows for single-hand operation
Weight	~1.6kg (3.5lbs)	
Graphical User Interface	Touchscreen and softkeys	Smartphone-inspired or protective gloves operation to fit any environment need
Protection Rating	IP-68	Minimizes cross-contamination risk and allows outdoor operation
Battery	>5hrs	Long-lasting charge with options for a recharger or docking station for 24/7 operation
Measurement Accessories	Adjustable focus nose cone, multiple size vials adaptor	Best results and confidence from a variety of packaging materials and sample shapes
<b>OPTICS AND LOCAL CONTROL</b>		
Excitation Wavelength	1064nm	Measure typical Raman detectable materials plus materials that cannot be detected at lower excitation wavelengths, due to fluorescence interference
Output Power and Exposure Time	30-490 mW adjustable laser excitation power, 5ms to 30s adjustable exposure time	Allows for customization of analysis parameters to obtain most accurate analysis of your specific materials
Spectral Range	200-2500cm <sup>-1</sup>	Covers the most relevant molecular information spectral features for material ID
Spectral Resolution (FWHM)	8-11 cm <sup>-1</sup>	High resolution reveals minor differences in similar materials
Grating Technology	Transmissive volume phase grating	Robust design for years of alignment-free operation
Spectral Efficiency	>90%	High sensitivity, fast analysis
Detector	512 pixels, TE cooled InGaAs	High resolution results
Local Control	Ultrafast quad-core processor Bluetooth, WiFi wireless, USB. High contrast, high resolution touch screen	Flexible operation: manual use by touch screen and large buttons or remote operation by PC or tablet using Bluetooth® or wireless
<b>MATERIAL ANALYSIS SOFTWARE</b>		
Material ID Algorithm	Wavelets-based, patent pending, for RMID and mixtures. HQI and pValue	Increases confidence in material ID with unparalleled sensitivity and accuracy
Quantitative Analysis	On-board chemometrics package (optional) including development and prediction mode	Extends usability to provide mixture analysis of semi-finished and finished products
Included Standard Library	Yes	Pharmaceuticals and chemicals validated spectra
User-Created Library	Yes	On-board database of your materials, rapid addition of new materials to your custom library
User Created Workflows and Reports	Yes	Fully customizable to fit your needs
<b>WORKFLOW</b>		
Electronic Records & Signature	Yes	Compliance with pharmacopoeia and regulatory requirements
Barcode Supported	Yes, linear and 2D built-in camera	Error free sample information entry
Scan Delay	Yes, user defined	Increase spectral quality consistency between operators
<b>OTHER SPECIFICATIONS</b>		
Certification	FDA 1040, 21 CFR, CE	
External Battery Supply	100~240VAC/+24VDC	
Operating Temperature	-20 to 50°C	
Warranty	24 months	

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