The LabSpec 6 spectroscopy suite offers an intuitive platform for Raman, photoluminescence (PL) and cathodoluminescence (CL) spectroscopy.

The sixth generation of spectroscopy software from HORIBA Scientific builds on previous award winning platforms to present a unique experience in instrument control and data processing.

Within a single interface, LabSpec adapts for different users in multi-user lab environments, allows users to automate and customize, and offers unrivalled functions to provide results fast.

➤ **Simplicity**
An intuitive interface enables logical work-flow through an experiment, from visualization of the sample and measurement set-up, to interpretation of the data, and final reporting of the results.

➤ **Power**
LabSpec is a powerful tool for the complete experiment, from instrument set-up and data acquisition, through to sophisticated routines for spectrum and image processing and display.

➤ **Quality and Compliance**
LabSpec 6 is a validated software which contains all the tools for users to meet regulatory compliance including GxP and the FDA’s 21 CFR part 11.
LabSpec 6 is compatible with the full range of HORIBA Scientific's Raman spectrometers, including the industrial XploRA ONE, analytical research XploRA PLUS and the versatile research LabRAM HR Evolution microscopes. Their unique performance capabilities are made easily accessible via LabSpec's intuitive user interface.

- Full range, seamlessly glued spectra acquired from CCD, EMCCD, InGaAs and single channel (PMT, lock-in amplifier) detectors
- Automated laser wavelength switching with just a single mouse click
- Optical microscope imaging with single field of view, and large area montaging
- Confocal DuoScan™ technology for adjustable laser spot size and high resolution sample mapping from deep UV to near infra-red
- Hyperspectral surface and 3D volume mapping using flexible point-by-point and ultra-fast SWIFT™ modes
- Automated multi-spectra experiment acquisition including kinetic, polarization and heating/cooling studies
- AFM-Server for combined Raman-AFM and TERS (Tip Enhanced Raman Spectroscopy) experiments
- Topographic and reflection imaging of sample surface

Ease of Use...Peace of Mind

OneClick
True one click operation for spectrum acquisition - get correct results fast without needing advanced technical knowledge

OneCheck
Automated alignment and calibration tools ensure that valid and optimized data are obtained time and time again

On-the-Fly Control

FLAT correction
Real-time on-the-fly fluorescence removal for easily interpretable data every time

Instant Processing
Advanced on-the-fly custom processing gives data ready for immediate analysis, without time-consuming further treatment

Efficiency and Throughput

ParticleFinder
Automated image based particle location, shape/size analysis and chemical ID with Raman spectroscopy

MultiWell
High throughput screening module for fast, automated analysis of sample arrays and well plates

Hybrid Technologies

Raman-AFM and TERS
The AFM-Server opens bidirectional communication between Raman and AFM systems, for push-button TERS and co-localized experiments

Epifluorescence
Identify analytical regions of interest using fully integrated, high performance, cooled fluorescence imaging cameras

Functions listed on this page may require specific hardware or software modules in order to be used. Please consult your HORIBA Scientific sales representative for full details.

1 XploRA ONE and XploRA PLUS systems only
2 LabRAM HR Evolution system only
3 Optional module, price on request.
**Data Analysis and Reporting**

- **Multivariate**
  Powerful data analysis methods for complex data sets including PCA, MCR, HCA, DCA and PLS

- **Database searching**
  Identify material composition with large spectral databases using the KnowItAll® informatics platform

- **Customized reporting**
  Create customized multi-data, multi-page templates for fast reporting of results

**Imaging**

- **Video overlay**
  Overlay Raman images onto optical microscope images for hybrid sample viewing

- **Image analysis and display**
  Fast conversion of hyperspectral map data into meaningful chemical images, with full display control

- **3D surface and volume display**
  Integrated topographic surface and 3D confocal volume display with rotation and lighting controls

**Automation / Customization**

- **Batch processing**
  Fast batch processing of multiple data files, for efficient high throughput data treatment

- **Templates and Methods**
  Instant recall of hardware settings, and fast, easy customization and automation of data acquisition and analysis functions

**Compliance / Security**

- **Validated performance**
  LabSpec 6 is a validated software, offering considered, tested and documented functionality and performance

- **User accounts**
  Secure password protected user access control with optimized user level based interfaces

- **Security**
  The configurable security module allows regulatory compliance, including 21CFR11 and GxP.
The distinctive LabSpec 6 user interface includes all the advanced functionality for which previous LabSpec versions are known, but with careful work-flow inspired layout to make any experiment fast and simple to work with. It offers a comfortable uncomplicated workspace for less-experienced analytical operators, and yet includes fast access to all advanced controls for those wishing to fine tune instrument configuration and experiment settings.

Adaptive toolbars present available tools for the currently active window

Large data tabs for viewing results. Each data type (spectra, maps and videos) are presented in separate tabs for an uncluttered interface

Streamlined menu system for fast access to major file and acquisition functions, without limiting availability of advanced functionality

Fast data selector for rapid switching between active data for manipulation and analysis results

Easy view status bar indicates system status, key configuration, and optional settings

Work-flow inspired right hand tabs include all key functionality, from data browser, through acquisition, to analysis and display
Upgrades

LabSpec 6 is available for upgrading many recent HORIBA Scientific Raman systems, whether they are currently running legacy LabSpec 5 or LabSpec 4 platforms, dating back to 2005 and earlier.

There are many benefits to upgrading, including:

- Optimized user interface with clear, logical distribution of functions and controls; combined with the User accounts module it ensures even less-experienced users in large multi-user lab environments can utilize LabSpec's powerful functionality with ease.
- Access to new modules such as Multivariate analysis, ParticleFinder, MultiWell and 3D Surface and Volume display.
- New and improved capabilities across the wide range of data acquisition, processing and analysis functions available in the LabSpec platforms.
- Create stunning images with a new selection of palettes and image display tools.
- Faster data processing and display, utilizing LabSpec's multi-processing and multi-threaded core.

Please contact your HORIBA Scientific service representative to enquire about upgrade requirements and costs for your system.

System Requirements

<table>
<thead>
<tr>
<th></th>
<th>Minimum</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPU</td>
<td>Intel® Core™ i3</td>
<td>Intel® Core™ i7</td>
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<tr>
<td>RAM</td>
<td>2 Gb</td>
<td>4 Gb or greater</td>
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<tr>
<td>HDD</td>
<td>2 Gb free space</td>
<td>10 Gb free space or greater</td>
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<tr>
<td>Monitor</td>
<td>1366 x 768</td>
<td>1920 x 1080 or greater</td>
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<tr>
<td>Operating System</td>
<td>Windows® XP SP3</td>
<td>Windows® 7</td>
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</table>

Training and Support

Our experienced Raman scientists based in well-equipped laboratories across the world are available to provide customized training both on-site and at HORIBA facilities. Such training ensures confident and knowledgeable users who will be able to harness the full power of LabSpec 6 to obtain results with minimum effort.

- New user training
- Refresher courses
- Introduction to Raman
- "How-to" instruction
- Data interpretation
- Advanced techniques

Please contact your HORIBA Scientific representative for further information about available training.

Find out more at www.horiba.com/labspec6