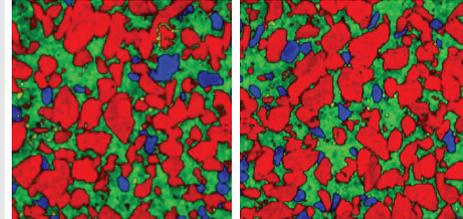


## SWIFTXS

### Supercharge your Raman Imaging!

A New Dimension in  
SuperFast Confocal  
Raman Imaging

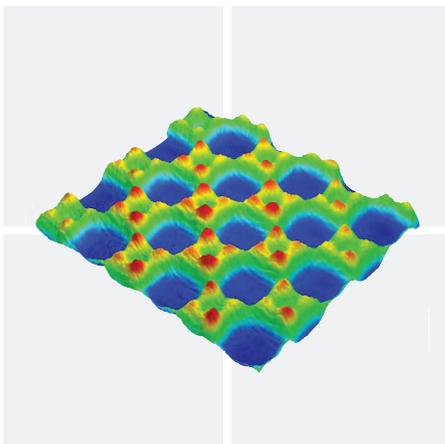


### Key Features & Benefits

SWIFTXS pushes the speed of confocal Raman imaging to the next level. Accelerate your chemical imaging and generate high definition Raman images in minute timescale. **Now that's Supercharged Raman!**

SWIFTXS integrates the HORIBA's newest EMCCD detector, combining unmatched speed and ultra-sensitivity.

- **Supercharged Speed:** Improve your sample throughput up to 1400 spectra per second.
- **High Definition Images:** MegaPixel Raman images are now possible in a single fast Raman map, providing both a broad overview and detailed high resolution work in a single experiment.
- **Ultrasensitive:** The Electron Multiplying CCD (EMCCD) technology provides significant increases in **sensitivity**, making it ideal for challenging samples with low signal levels.
- **Fully Confocal Fast Imaging:** The true confocality of HORIBA's Raman spectrometers will give you the highest resolution, image detail and flexibility for analysis of small particles and thin layers.



Structured semiconductor device  
mapped with **SWIFTXS**

40 200 spectra  
Total time = 50 s

# Three Raman Imaging Modes

The EMCCD detector can be operated in three modes:



#1

## Standard Mode: Slow scan CCD operation

For control of sensitivity, dynamic range and ultra low readout noise for low photon / slow scan applications



#2

## SWIFTXS Ultra Mode:

Fastest Raman imaging offering up to 1400 spectra per second for real life images in seconds.



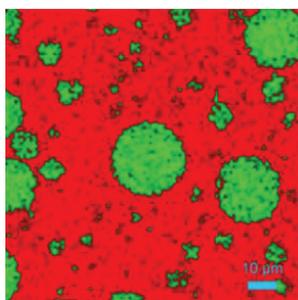
#3

## SWIFTXS High Contrast Mode:

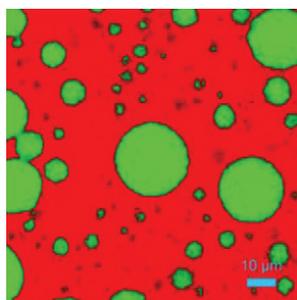
Combination of fast readout rates and enhanced signal - the best combination for difficult imaging samples and improved S/N imaging and contrast.

## Applications

### Standard Mode vs SWIFTXS - Polymer Blend Mapping



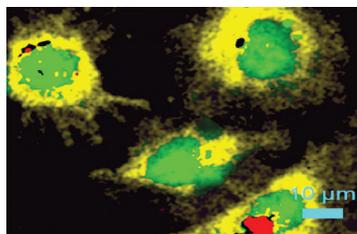
Standard Mode



SWIFTXS

10 000 spectra  
Scan range = 100 µm x 100 µm  
Step size = 1 µm  
Same acquisition time for standard mode and SWIFTXS  
Enhanced contrast with SWIFTXS

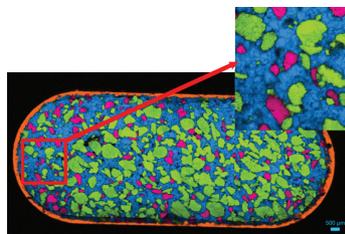
### Bio Sensitivity - Cells in a microtubule matrix



40 533 spectra  
Scan range = 92 µm x 71 µm  
Step size = 0.4 µm  
Total time = 5 min 15s

SWIFTXS

### MegaPixel Image - Pharmaceutical Tablet



>2.6 million spectra  
Scan range = 1.9 cm x 0.9 cm  
Step size = 8 µm  
High resolution images

SWIFTXS

## SWIFTXS Package Includes:

SWIFTXS is compatible with HORIBA's LabRAM HR Evolution and XploRA PLUS Raman microscopes, and includes:

- Synapse EMCCD Camera - Deep cooled and low readout noise
- Electronic and software optimization to reduce the CCD readout zone



HORIBA for Supercharged Raman Imaging  
Check out: [horiba.com/swiftxs](http://horiba.com/swiftxs)



**HORIBA**  
Scientific

[info.sci@horiba.com](mailto:info.sci@horiba.com)

[www.horiba.com/scientific](http://www.horiba.com/scientific)

**USA:** +1 732 494 8660  
**UK:** +44 (0)20 8204 8142  
**China:** +86 (0)21 6289 6060

**France:** +33 (0)1 69 74 72 00  
**Italy:** +39 2 5760 3050  
**Brazil:** +55 (0)11 2923 5400

**Germany:** +49 (0)6251 8475-0  
**Japan:** +81 (75) 313 8123  
**Other:** +33 (0)1 69 74 72 00