HORIBA
Scientific

Microsense
Sample Handling

> **Measure as little as 1 µl of sample with any HORIBA fluorometer.**

Introduction

Microsense is a microliter fluorescence sample-handling device designed to integrate with HORIBA's steady-state and time-resolved fluorometers. 1-5 µL are all that is required to get quality reproducible spectra or time-resolved information. Samples do not have to be diluted, which not only saves your sample, but increases sensitivity. The all-quartz optical design provides high efficiency as well as a large spectral range of operation.
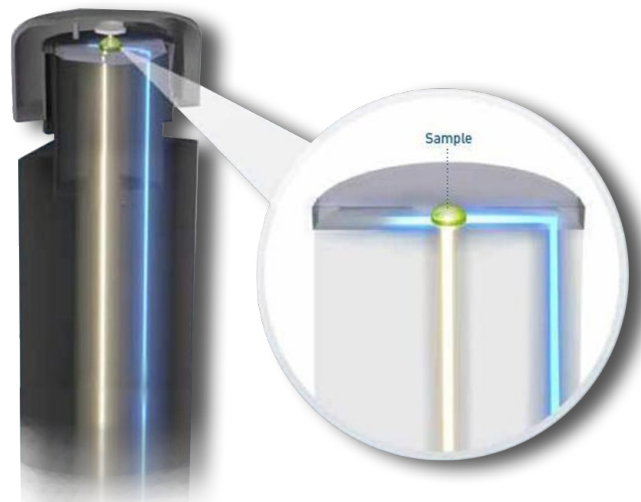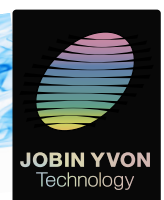
Figure 1: Microsense's unique 90° geometry maximizes excitation and collection efficiency while reducing stray light. Excitation light (blue) is guided laterally across the sample. Emission light (light yellow) is captured with a second quartz guide and directed towards the detector. A mirror in the cap increases the efficiency of the device.

Figure 2: The sample sits conveniently on the surface of Microsense, making recovery and cleaning simple.

horiba.com/scientific
email: info.sci@horiba.com

JOBIN YVON
Technology

Don't Dilute and Win

Diluting samples means losing twice. First, dilution means not being able to do your next experiment with the same sample. Second, dilution decreases the sensitivity of the measurement.
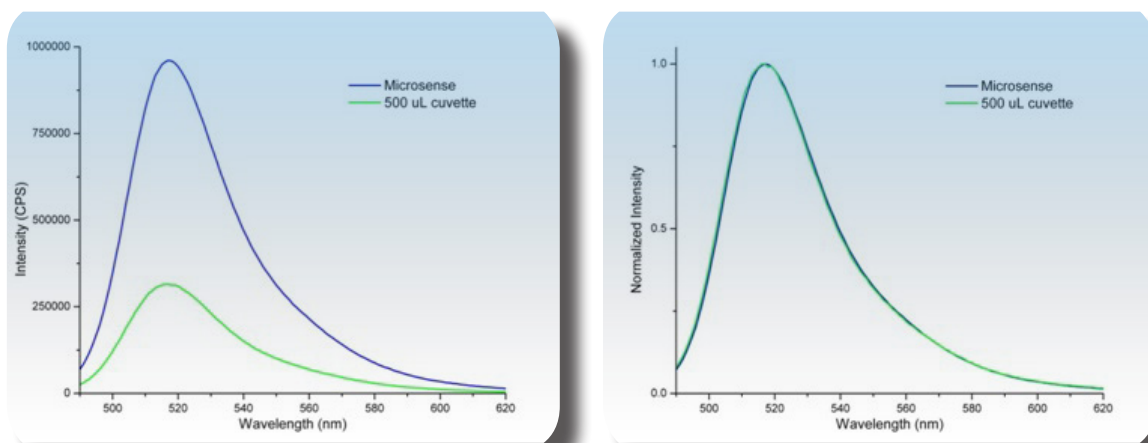

Figure 3: Alexa Fluor 488 goat anti-mouse IgG. Left: The best sensitivity of the sample is achieved by avoiding dilution.
Using an undiluted sample in Microsense can easily outperform dilution into a reduced volume cuvette.
Right: A normalized plot of the same data shows the ability of the all-quartz optical path of the Microsense to yield correct spectra.

Time-Resolved Spectroscopy

Microsense is also compatible with our time-resolved systems. Now you can perform your TCSPC, phosphorescence, FRET, and TRES measurements on as little as 1 µL of sample!
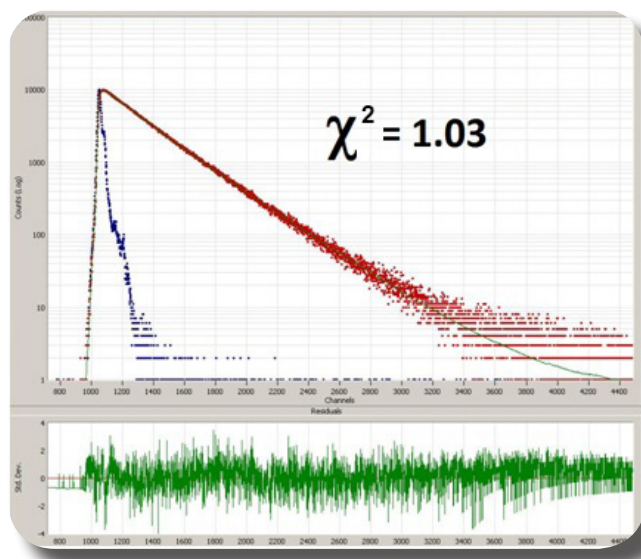

$$\chi^2 = 1.03$$

Figure 4: Alexa Fluor 488 goat anti-mouse IgG.
Prompt FWHM = 315 ps.
Data fit to a discrete exponential model.

JOBIN YVON
Technology

info.sci @horiba.com   **www.horiba.com/scientific**

USA: +1 732 494 8660	**France:** +33 (0)1 64 54 13 00	**Germany:** +49 (0) 89 4623 17-0
UK: +44 (0)20 8204 8142	**Italy:** +39 2 5760 3050	**Japan:** +81 (0)3 6206 4717
China: +86 (0)10 8567 9966	**Brazil:** +55 (0)11 5545 1514	**Other:** +33 (0)1 64 54 13 00

HORIBA
Scientific

Explore the future   Automotive Test Systems I Process & Environmental I Medical I Semiconductor I Scientific   **HORIBA**