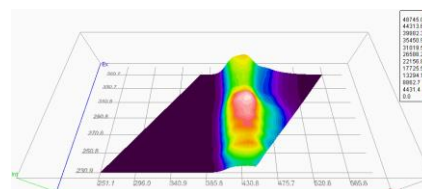


## THE ANALYZER OF THE SPECTRAL FLUORESCENCE SIGNATURES SFS-GO™

### GENERAL DESCRIPTION

The SFS-Go™ is a compact scanning spectrometer designed to measure the Spectral Fluorescence Signature (SFS) of liquid, powder and solid samples. The SFS is an excitation emission matrix of spectral intensity of a sample with filtered out elastic (Rayleigh) scattering. The SFS-Go is optically designed as a mostly-reflection spectrometer to operate in a wide spectral range with minimal chromatic aberrations.



*Spectral Fluorescence Signature (SFS) in 3-D view*



*The SFS-Go™ analyzer with the optical cell unit (left) and the fiber probe (right).*

The device has 2 configurations and can be used:

- with short optical fibers to the optical cell unit to measure at 90-degree fluorescence scheme with a small quartz cuvette for holding the liquid sample (~4ml).
- with long optical fibers to the measurement fiber probe, which enables measuring solid and powder samples or basically any flat surface.

The SFS-Go™ can be used in a large variety of applications, providing the qualitative and quantitative analysis of the organic constituents in liquid, powder and solid samples, including PAH, oils, lubricants, phenols, organic chemicals, etc., as well as living biomaterials (plants, bacteria, viruses, spores, etc.).

SFS-Go™ can work as a quick screening tool in an industrial environment, especially to reduce the number of routine and time-consuming analyses, giving quick qualitative and quantitative information about the changes in the oil or other chemical substance under investigation. The principle merits of this technique are its high sensitivity, selectivity, and simplicity of the operating procedure.

## TECHNICAL SPECIFICATION

### SFS-GO HARDWARE

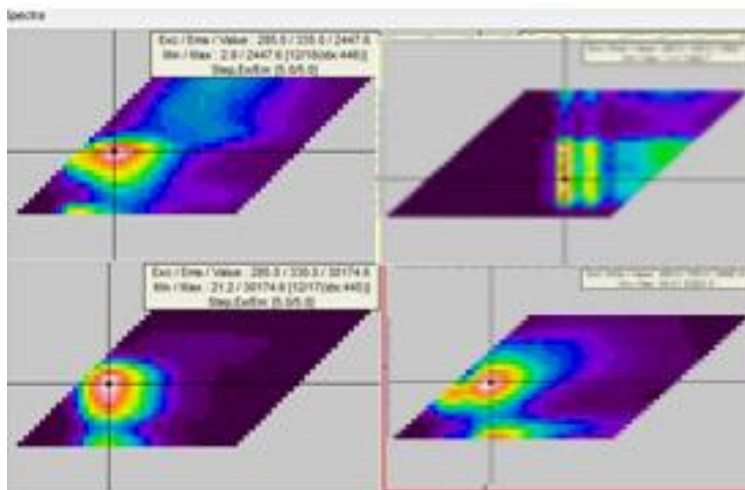
Accuracy	Better than 10%
Response time	20 seconds (full SFS scan)
Light source	Pulsed Xenon lamp, 20 Watt
Spectral unit	Scanning excitation / emission monochromators
Spectral range	220 – 670 nm excitation; 230 – 680 nm emission
Detector type	Photo Multiplier Tube
Sample cell	standard cuvette fiber block or handle-block fiber
Cell volume	~4 ml, 10mm x 10mm x 44mm internal dimension
PC connection	WiFi, may need special USB adapter
Control unit	Built-in processor controller
Remote control	WiFi
Device calibration	Automatic, only reference-channel measurement
Voltage	100-240V, 50-60Hz
Power consumption	40 W
Dimensions (HxLxW)	190 x 230 x 300 mm plus fiber-optic attachment
Weight	5 kg

### SAMPLE CONDITION:

Temperature 15 – 35°C  
Volume ~4ml

### SOFTWARE

Operating system  
Windows 7/8/10  
Data storage  
Local database



*The SFSs of different samples: E-coli in water, benz(a)piren in water, spores on the ground, oil product in water (from top left to down right).*

For more details: [www.ldi-innovation.com](http://www.ldi-innovation.com)