HORIBA Scientific

Sulfur-in-Oil

SLFA-60/6000 Series

X-ray Fluorescence Sulfur-in-Oil Analyzer

SLFA-60/6000 series for a new generation of petroleum products

Compact & Robust Design | **Simple Operation** | **Safety Features** | **Wide Sample Range**

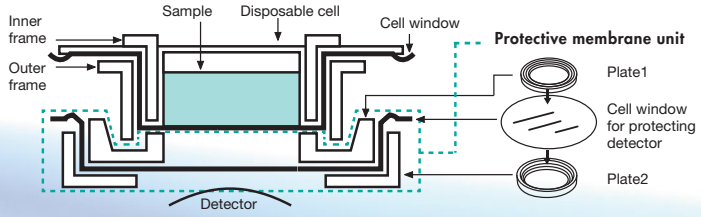
HORIBA introduces the new standard of sulfur-in-oil analyzers, the SLFA-60 and 6000 series.
These instruments feature new software and hardware to meet the growing challenges in the petroleum industry.

Compact & Robust Design

Secondary Window to Prevent Leakage

Both the SLFA-60 and 6000 series have a protective membrane covering the cell window to prevent the detector and X-ray tube from accidental sample leakage. This protective membrane unit is simple to assemble and replace.

Cross section of sample cell and detector

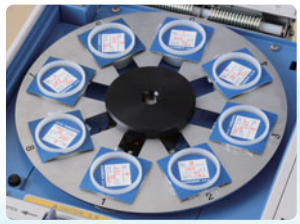


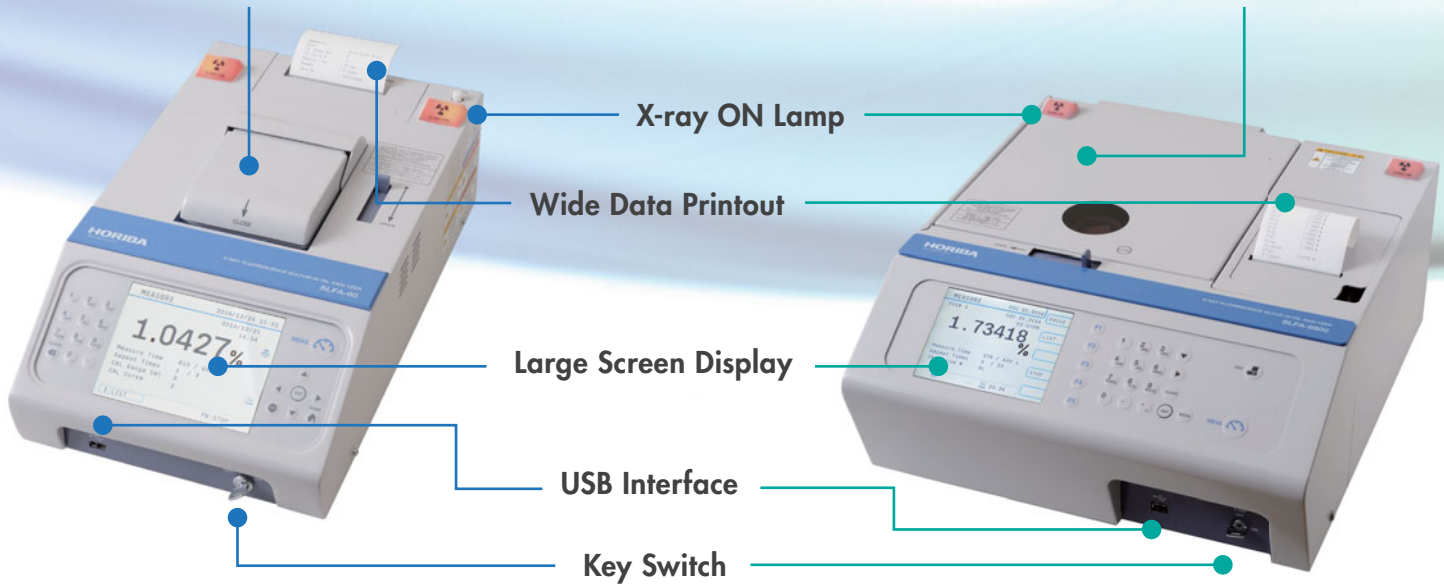
Large Screen Display

The easy viewing monitor screen will display real-time data in ppm or %.

Turntable (SLFA-6800 only)

The turntable equipped with the SLFA-6800 has been newly devised. Newly designed stepper motor is more robust and faster between sampling.





SLFA-60 | **SLFA-6100/6800**

Simple Operation

Measurement Procedure

1. Pour the sample into the sample cell
2. Place the sample cell on the sample holder
3. Set to the measurement condition
4. Press the “MEAS” button to start the measurement
5. Instrument displays the results and data output

Calibration

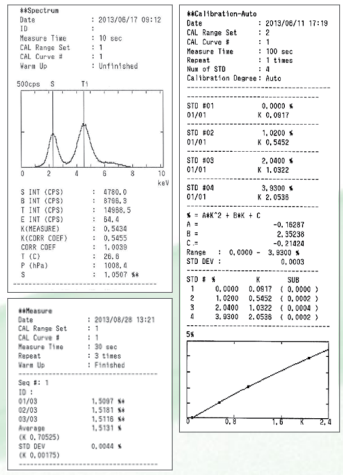
New software allows the SLFA-60 to store 3 sets of calibration and the SLFA-6000 series 5 sets. It also allows the users to choose between linear or quadratic curves.
Calibration curves are restored manually without having to recalibrate as long as the users save the coefficients value/calibration data.

Output Options

Print out, USB memory stick and USB cables connected to PC are available as output options.
* Printer can be switched off if not used.

i) Wide Data Printouts

The users can control the contents/volume of the information on the printouts. There are 3 layout options. Printouts show sample ID, X-ray spectrum, date/time, measurement average value, standard deviation and calibration curve graph etc., on 80 mm wide format for easy viewing.



ii) USB Output

The user can transfer data into USB memory or PC connected with USB cable.

Safety Features

In addition to our thorough X-ray leakage tests at the factory, the SLFA series are equipped with these safety functions:

Key Switch

Only when the key switch is in the “ON” position, X-rays are turned on.

Shield Shutter

Even if the lid is open, X-rays are continuously on. However, the shield shutter covers the X-ray and will prevent leakage that might be emitted.

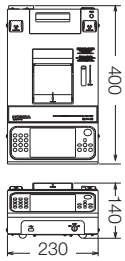
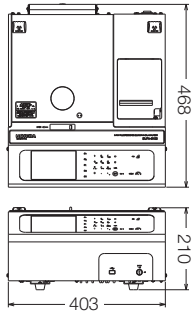
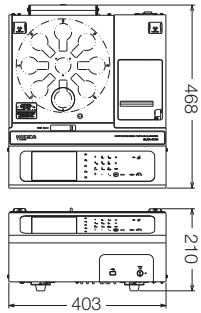
The shield shutter

Wide Sample Range

Expanded Measurement Range (0 - 9.9999 wt%)

The SLFA-60 has expanded its range compared to the conventional model, and now both the SLFA-60 and 6000 series can measure from 0 - 9.9999%.

Technical Specifications

	SLFA-60	SLFA-6100	SLFA-6800
Measurement principle	X-ray Fluorescence Analysis Method		
Measurement samples	Sulfur in petroleum products such as heavy oil, naphtha, crude oil and light oil		
Measurement range	0 - 9.9999%		
Repeatability	15 ppm or less with a 1% sulfur sample	5 ppm or less with a 1% sulfur sample, 1.6 ppm or less with a 0% sulfur sample	
C/H error correction	+/- 50 ppm or less per C/H *with a 1% sulfur sample		
Lower detection limit	20 ppm or less *	5 ppm or less *	
Number of calibration curves	Up to 15 calibration curves		
Calibration curve order	Linear or Quadratic (both automatic selection and manual settings are available)		
Amount and number of samples	4 - 10 mL, 1 sample		4 - 10 mL, 8 samples
Measurement time	10 - 600 sec		
Data output	Printout, USB memory stick, USB cable connected to PC		
Spectrum measurement	Energy Range: 0 - 10 keV, spectrum analysis to verify instrument performances		
Operating temperature	+ 5 ℃ to + 40 ℃ (+ 41 ℉ to 104 ℉)		
Operating humidity	80% max relative humidity in temperature range + 5 ℃ to + 30 ℃ (+ 41 ℉ to 86 ℉) Linear decrease to 50% relative humidity in temperature range + 31 ℃ to + 40 ℃ (+ 88 ℉ to 104 ℉)		
Power supply	AC 100 - 240 V +/- 10%, 50/60 Hz		
Power consumption	80 VA	150 VA	
Conformity standard	ASTM D4294 (USA), ISO 8754, JIS K2541/B7995		
Weight	Approx. 9 kg	Approx. 21 kg	Approx. 23 kg
Dimensional Outlines (Unit: mm)			

* 3 times the standard deviation with a 0% sample

Please read the operation manual before using this product to assure safe and proper handling of the product.

Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.

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