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New! F-2710 Fluorescence Spectrophotometer

Now available for PC control only, more powerful and flexible

Main features:

- **Leading-edge sensitivity (800 or better RMS)**
- **Wide dynamic range (with improved zero point adjustment)**
- **Powerful PC control provides faster scanning speed and 3-D scan, ready for advanced applications**
- **Automatic performance validation**
- **Wide range of accessories to support a variety of applications**

Hitachi—The Reliability Leader in Spectroscopy

Hitachi High Technologies America, Inc.
Life Sciences Division
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E-mail: sales-LS@hitachi-hta.com
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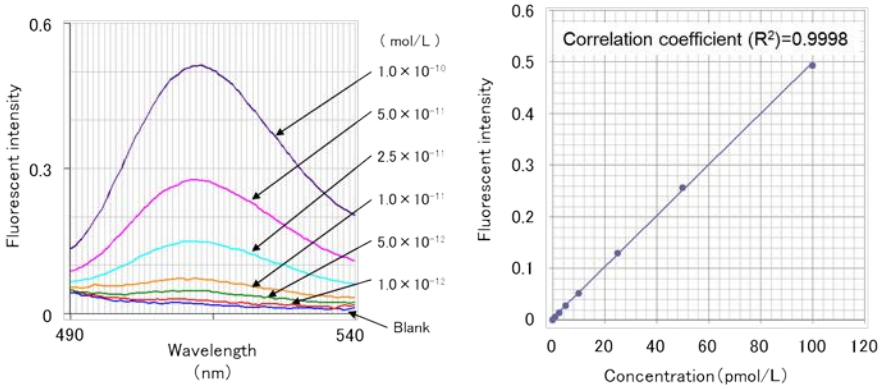
F-2710 high sensitivity measurement example



Hitachi's unique high-efficiency diffraction grating and low-noise detection system allow for measurement of very low concentrations.

Even with low fluorescence intensity, a superior calibration relationship can be achieved, and very small amounts of fluorescein, on the order of $1x10^{-12}$ mol/l, can be detected. As shown here, a coefficient of determination of 0.9998 is achieved even reading very low sample concentrations.

F-2710 Main Specifications

Operation mode	PC control only
Light source	150W Xenon Lamp in self-deozonating lamp housing
Photometric Principle	Monochromatic light monitoring with ratio calculation
Sensitivity	S/N 800 or above (RMS) Raman spectrum of water: Ex 350nm, Band pass 5nm, Response 2 sec.
Wavelength scan speeds	60, 300, 1,500, 3,000 and 12,000 nm/min. (1,500 nm/min for pre-scan
Slit width (both EX and EM)	2.5, 5. 10, 20nm (four stages)
Measuring wavelength range	220 to 730nm and zero order light Ex and Em sides (800nm using optional PMT)
Dimensions/weight	600 (W) x 503 (D) x 343 (H) mm / Approx. 41 Kg
Power source	100, 115, 220, and 240 V AC, 50/60 Hz, 400 VA

FL Solutions software

Wavelength Scan:
Excitation / Emission/ Synchronous
Repeated measurements/ CAT
Spectral correction: 220 to 600 nm on both Ex and Em sides*
Spectral Correction long-wavelength range 500 to 800nm on both Ex and Em sides*
Trace, scale conversion, graph axis change
Peak/ Valley detection
Smoothing
File-to-file calculation (addition, subtraction, multiplication and division)

Wavelength Scan (cont.)
Area calculation
Spectrum normalization
Spectrum averaging
Half-value width calculation

Time Scan Measurement:
Fluorescence time scan measurement
Trace, Scale conversion, Graph axis change
Differentiation
Rate calculation
File to file calculation

Photometric Mode:
WL Scan available in photometry mode
Calibration curve (linear, quadratic, cubic, polygonal), coefficient input.
Calibration curve trace
Statistical calculation
Interrupt measurement, sample blank measurement, data deletion
Peak-rate based quantification, peak-area quantification
2 or 3 wavelength calculation
Cumulative data averaging

* Optional accessories required

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