SAC Series Sample Chambers for Fluorescence, PL, Transmission and Reflection

Model SAC Series · waveqvanta.com/products/sac-series-sample-chambers-for-fluorescence

Sample chambers that attach to monochromators for fluorescence, photoluminescence, transmission, reflection and absorption measurements.



The SAC series provides four types of sample chamber for spectrometer-based measurements: SAC-Fluo for fluorescence, SAC-PL for laser-excited photoluminescence, SAC-RF for transmission, reflection and absorption, and the fiber-coupled SAC-FT for transmission and absorption. SAC-Fluo, SAC-PL and SAC-RF mount directly on Omni-λ series spectrometers with manual slits, and the reflective-optics versions are offered with aluminium, silver or gold mirrors for different wavelength regions.

Key features

- SAC-Fluo: spacious, easy-access chamber with F/1 collection optics and an external laser excitation path; optional cryostat upgrade
- SAC-PL: reflective optics free of chromatic aberration, lens focusing of the laser, two laser traps to reduce stray light, 134–170 mm adjustable beam height
- SAC-RF: reflective, parallel-beam optics for transmission, reflection and absorption spectra
- SAC-FT: fiber-coupled (SMA905), parallel beam path for UV-VIS-NIR, holder for 0.5-, 1- and 2-inch filters up to 4 mm thick
- Mirror coatings: aluminium (UV-VIS-NIR), silver (VIS-NIR) or gold (infrared)
- 25/25.4 mm filter mounts in SAC-Fluo, SAC-PL and SAC-RF
- Supplied with a cuvette and model-specific sample holders

Specifications

Chamber Types	SAC-Fluo, SAC-PL (PL05/PL06), SAC-RF (RF03/RF04/RF05), SAC-FT
Compatibility	SAC-Fluo, SAC-PL, SAC-RF: Omni-λ series spectrometers with manual slit
SAC-Fluo Optics	F/1 design, external laser excitation path
SAC-Fluo Option	Cryostat upgrade
SAC-PL Beam Height	134–170 mm, adjustable
SAC-PL Stray-Light Control	Two laser traps; laser focused on sample by lens
Filter Mounts (Fluo, PL, RF)	25/25.4 mm filters
SAC-FT Fiber Interface	SMA905 (fibers not included)
SAC-FT Filter Holder	0.5-, 1- and 2-inch square or round filters, up to 4 mm thick
SAC-SH11	Film sample holder
SAC-SH12A	Powder sample holder
SAC-SH13	Cuvette sample holder
SAC-SH14	Transmission sample holder
SAC-SH15	Cuvette sample holder (fluorescence)

Model overview

Model	Measurement	Optics	Wavelength Region	Standard Accessories
SAC-Fluo	Fluorescence	F/1 collection, external laser path	–	Cuvette, SAC-SH15, SAC-SH11, SAC-SH12A
SAC-PL05	Laser-excited PL	Reflective, aluminium mirror	UV-VIS-NIR	Cuvette, SAC-SH15, SAC-SH11, SAC-SH12A
SAC-PL06	Laser-excited PL	Reflective, gold mirror	Infrared	Cuvette, SAC-SH15, SAC-SH11, SAC-SH12A
SAC-RF03	Transmission, reflection, absorption	Reflective, aluminium mirror, parallel beam	UV-VIS-NIR	Cuvette, SAC-SH13, SAC-SH14
SAC-RF04	Transmission, reflection, absorption	Reflective, gold mirror, parallel beam	Infrared	Cuvette, SAC-SH13, SAC-SH14
SAC-RF05	Transmission, reflection, absorption	Reflective, silver mirror, parallel beam	VIS-NIR	Cuvette, SAC-SH13, SAC-SH14
SAC-FT	Transmission, absorption	Fiber-coupled (SMA905), parallel beam	UV-VIS-NIR	Cuvette, filter holder

Typical applications

- Fluorescence spectroscopy
- Laser-excited photoluminescence measurements
- Transmission, reflection and absorption spectroscopy
- Infrared fluorescence and reflectance measurements
- Liquid, film and powder sample measurements