Sampling Accessories
Integrated Sampling Systems

These Integrated Sampling Systems are direct-attach cuvette holder and light source combinations created specifically for our USB2000+ and USB4000 Spectrometers (page 14). Both systems receive power and control signals though a connector on the spectrometer.

USB-ISS-UV-VIS
Integrated Sampling System
The USB-ISS-UV-VIS Integrated Sampling System is a direct-attach sample holder and deuterium tungsten halogen light source (200-1100 nm) combination for 1-cm square cuvettes. The USB-ISS-UV-VIS allows you to adjust the intensity of the bulb via software. The sampling system has an electronic shutter for taking dark measurements and comes with a 5-volt power supply.

USB-ISS-VIS
Integrated Sampling System
The USB-ISS-VIS Integrated Sampling System has a violet LED-boosted tungsten source (390-900 nm) and a sample holder that bolts to the front of a USB4000 or USB2000+ Spectrometer. The spectrometer provides the power and control signals for the light sources. The USB-ISS-VIS holds 1-cm cuvettes.

ISS-UV-VIS
Integrated Sampling System
The ISS-UV-VIS Integrated Sampling System is a combination RF deuterium source with a tungsten bulb in a housing connected to a holder for 1-cm cuvettes. This sampling system couples to an Ocean Optics spectrometer with optical fiber to create a small-footprint system for relative absorbance. This sampling system is best used with Ocean Optics' 300 µm solarization-resistant optical fiber.

ISS-2
Integrated Sampling System
The ISS-2 Integrated Sampling System is a fully integrated 1-cm cuvette holder and tungsten halogen light source for relative absorbance measurements. It couples to Ocean Optics spectrometers with optical fiber to create a small-footprint system for VIS-NIR (~360-1100 nm) applications.

Specifications	USB-ISS-UV-VIS	USB-ISS-VIS	ISS-UV-VIS	ISS-2
Dimensions (mm):	198 x 105.1 x 40.6	40.7 x 88.8 x 34.1	198 x 104.9 x 40.9	155 x 50 x 53.3
Weight:	200 g	130 g	400 g	240 g
Power consumption:	1.8 A @ 5 VDC	160 mA @ 5 VDC	420 mA @ 12 VDC	600 mA @ 12 VDC
Wavelength range (source):	~200-1100 nm (Typical)	390-900 nm (Typical)	~200-1100 nm (Typical)	~360-1100 nm (Typical)
Pathlength:	1 cm	1 cm	1 cm	1 cm
Cuvette shape:	Square	Square	Square	Square
Light source:	Deuterium tungsten	Tungsten and violet LED	Deuterium tungsten	Tungsten
Bulb life (hours):	800 (deut.); 2,000 (tung.)	2000 (tungsten); 45,000 (LED)	800 (deut.); 2,000 (tung.)	900
Time to stabilized output:	~30 minutes	~5 minutes	~30 minutes	~30 minutes
Filter slot:	None	None	None	6.35 mm
Recommended optical fibers:	None	None	QP400-025-SR	QP400-2-UV-VIS
Spectrometers:	USB2000+ and USB4000	USB2000+ and USB4000	All	All
"Z" dimension:	15 mm	15 mm	15 mm	15 mm