

Vernier Spectrophotometer Optical Fiber

Order Code VSP-FIBER



The Vernier Spectrophotometer Optical Fiber is an accessory for Go Direct® SpectroVis® Plus Spectrophotometer, Vernier UV-VIS Spectrophotometer, Go Direct UV-VIS Spectrophotometer, Vernier Fluorescence/UV-VIS Spectrophotometer, and the Go Direct Fluorescence/UV-VIS Spectrophotometer. It allows these spectrophotometers to measure light emissions using Vernier Spectral Analysis® on a computer, Chromebook™, tablet or phone, LabQuest® 2, and LabQuest 3.

Measuring an Emission Spectrum

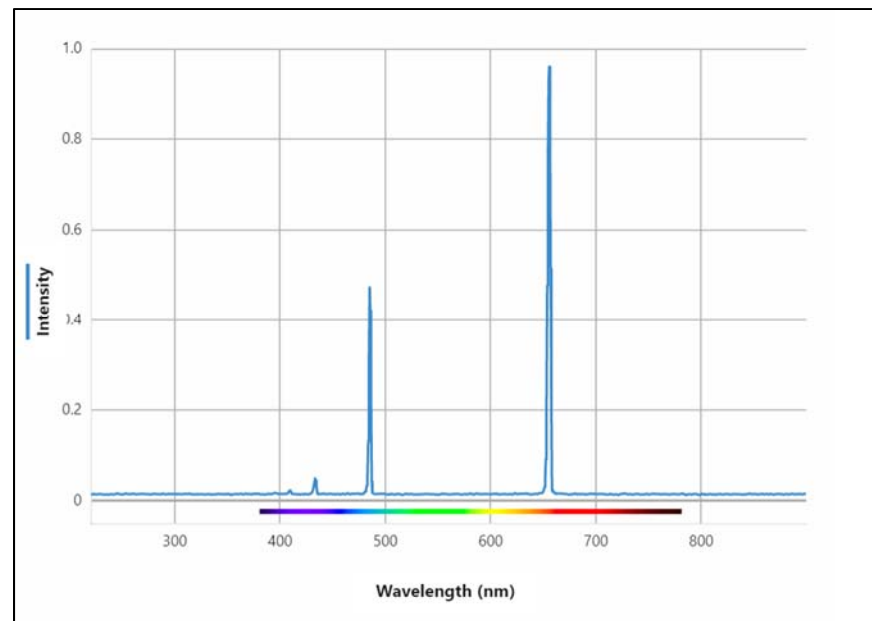
1. Connect the spectrophotometer and launch the software.
2. Insert the Optical Fiber into the spectrophotometer so that the cuvette insert fits into the keyed opening. **Note:** If the instrument has a power switch, it should be in the OFF position to measure emission spectra.
3. Collect Emissions Data. Intensity is a relative measure with a range of 0–1. **Note:** The spectrophotometer is not calibrated for measuring intensity quantitatively.
 - In Spectral Analysis, select Emissions vs Wavelength as your experiment type.
 - In LabQuest 2 or LabQuest 3, go to the Meter screen in LabQuest App. From the Sensors menu, choose Change Units ► USB: Spectrometer ► Intensity.
4. Aim the tip of the optical fiber cable at a light source. Start data collection. Stop to end data collection.

If the spectrum maxes out (flat and wide peaks at a value of 1), increase the distance between the light source and the tip of the optical fiber cable or reduce the integration time.

To adjust the integration time:

- In Spectral Analysis, navigate to Collection Settings, ⚙. Set the Integration Time (begin with 75 ms, with subsequent reductions by 20 ms) to a suitable value.
- In LabQuest App, go to the Meter screen. Choose Sensors ► Data Collection. Set the Sample Time (begin with 75 ms, with subsequent reductions by 20 ms) to a suitable value and decrease the Samples to Average to 1.

CAUTION: The optical fiber is made of plastic and can melt if overheated. Take care when doing flame tests and make sure the tip of the fiber stays several inches from the flame.



Hydrogen emission spectrum using the Go Direct UV-VIS Spectrophotometer and the Vernier Spectrophotometer Optical Fiber

Warranty

Warranty information for this product can be found on the Support tab at www.vernier.com/vsp-fiber

General warranty information can be found at www.vernier.com/warranty



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