

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, and the Vernier Fluorescence/UV-VIS Spectrophotometer. It allows these spectrophotometers to measure light emissions using Logger Pro® 3 (version 3.13 or newer) on a computer, original LabQuest® (version 1.7.6 or newer), or LabQuest® 2 (version 2.7.2 or newer). Chromebook™ support will be coming at a later date.

Measuring an Emission Spectrum

1. Connect the spectrophotometer to the computer or LabQuest 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. Change units to Intensity. Intensity is a relative measure with a range of 0–1. **Note:** The spectrophotometer is not calibrated for measuring intensity quantitatively.
 - If using a computer, choose Change Units ► Spectrometer ► Intensity from the Experiment menu in Logger Pro.
 - If using LabQuest 2 or original LabQuest, go to the Meter screen in LabQuest App. Choose Change Units ► USB: Spectrometer ► Intensity from the Sensors menu.
4. Aim the tip of the optical fiber cable at a light source. Start data collection. Stop to end data collection.

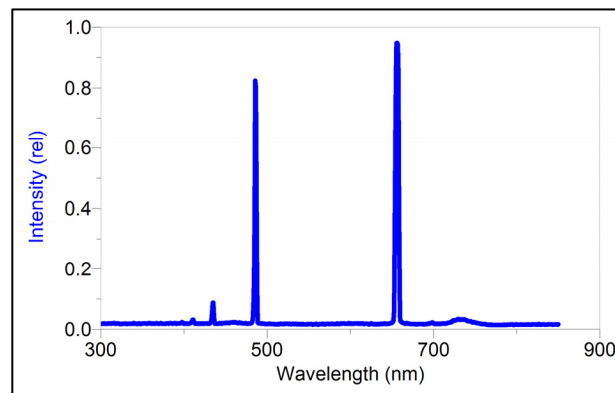
If the spectrum maxes out (flat and wide peaks at a value of 1), increase the distance between the light source and the tip of the optical fiber cable or reduce the sample time.

To adjust the sample time:

- If using a computer, choose Set Up Sensors ► Spectrometer: 1 from the Experiment menu. 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.

- If using LabQuest 2 or original LabQuest, go to the Meter screen in LabQuest App. 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.

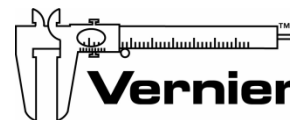


Hydrogen emission spectrum using the Vernier UV-VIS Spectrophotometer and the Vernier Spectrophotometer Optical Fiber

Warranty

Vernier warrants this product to be free from defects in materials and workmanship for a period of one year from the date of shipment to the customer. This warranty does not cover damage to the product caused by abuse or improper use.

Note: Vernier products are for educational use only.



Vernier Software & Technology

13979 S.W. Millikan Way • Beaverton, OR 97005-2886
Toll Free (888) 837-6437 • (503) 277-2299 • FAX (503) 277-2440
info@vernier.com • www.vernier.com

Revised 1/24/2017

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