

Wavelength Calibration Standard: NIR

Calibration Source for NIR Spectrometers

The AR-1 Argon Calibration Source is a spectral wavelength calibration source specifically designed for NIR spectrometers like our NIR256 and NIR-512 (see pages 30-31). The AR-1 produces low-pressure argon atomic emission lines from 696-1704 nm for use in performing fast, reliable spectrometer wavelength calibrations. The spectral emission lines are printed on the lamp's housing.

Convenient Operation

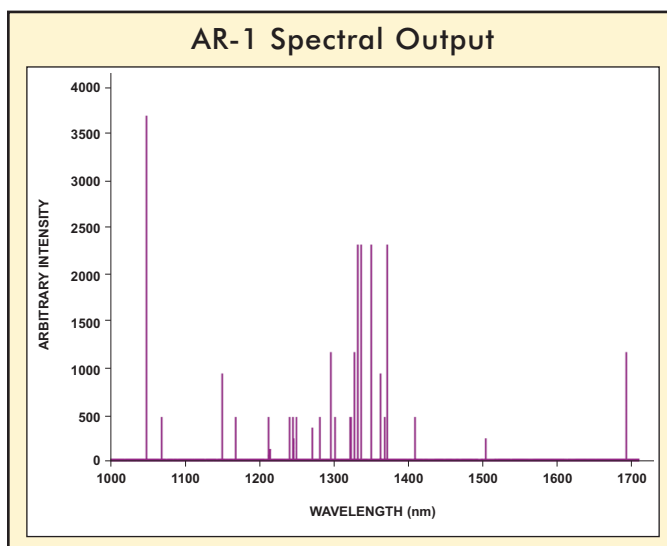
Our spectrometers are carefully calibrated as part of our standard quality assurance process. However, as is the case with all optical benches, slight drift in wavelength occurs due to time and environmental conditions. With the AR-1, you can recalibrate your spectrometer using a spreadsheet program such as Microsoft Excel or a calculator that performs third-order polynomial regressions.

Conveniently Portable

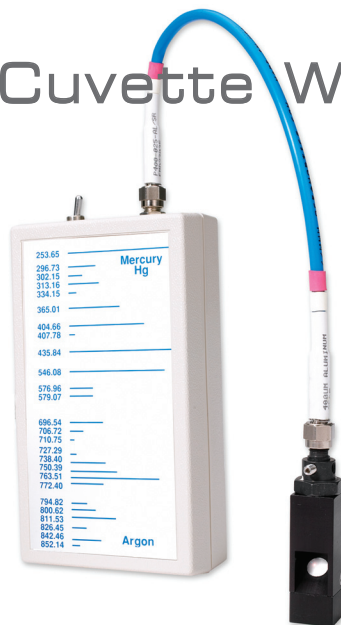
The AR-1 operates with a 12 VDC power supply (included) or a 9V battery (not included) for field use. The AR-1 features an SMA 905 Connector for interfacing to optical fiber assemblies.



Specifications	
Dimensions:	125.7 mm x 70 mm x 25.8 mm
Weight:	40 g
Wavelength range:	696-1704 nm
Power consumption:	250 mA @ 12 VDC
Power requirements:	12 VDC wall transformer (included) or 9 VDC battery (not included)
Voltage:	600 volts at 30 kHz
Bulb life:	~3,500 hours (at 20 mA)
Time to stable output:	~1 minute
Connector:	SMA 905



Cuvette Wavelength Calibration Adapter



The PS-HG1-ADP Wavelength Calibration Adapter is a 1-cm square fixture that fits into a 1-cm pathlength sample chamber and then connects to the HG-1 Mercury Argon Calibration Standard or the AR-1 Argon Wavelength Calibration Standard via optical fiber. (Neither Wavelength Calibration Standard nor optical fiber is included.) The adapter is designed for performing a wavelength calibration for a USB2000 or USB4000 Spectrometer and a direct-attach sampling system. However, the adapter can be used with any post-dispersive spectrometer and 1-cm cuvette holder, whether it's designed by Ocean Optics or another manufacturer.

