# **GDS900**

## Extension Spectrometer

## Specification Sheet

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Design	Littrow-mounted, Rowland Circle
Focal Length	350 mm
Groove Density	390 grooves/mm
Grating	Holographic
Detector	Charge-coupled array with 4,000 active pixels (14.0 $\mu$ m W x 0.9 mm H pixel size)
Spectral Range	460 nm to 850 nm
Resolution	200 pm (0.2 nm)
Operating Temperature	18 °C to 30 °C (64 °F to 86 °F)
Humidity	20 to 80% (non-condensing)
Dimensions	15 in H x 22 in W x 6 in D (38 cm H x 56 cm W x 15 cm D)
Weight	45 lb (20 kg)

#### **Part Numbers**

GDS900DCEXBO	GDS900 Bulk Analysis Package w/DC lamp, Extension Spectrometer, PC, Touch-Screen, and Vacuum Pump
691-103-440	Extension Spectrometer Kit for GDS SN 23920 and higher

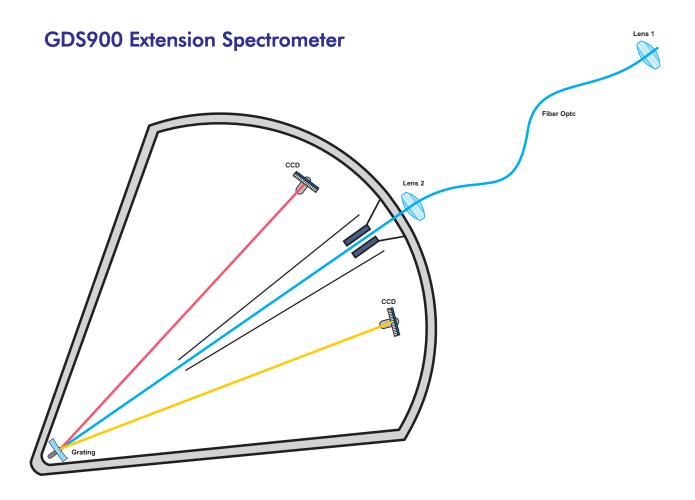






### Theory of Operation

This small, relatively low resolution, spectrometer is similar in principle to the main spectrometer. Light is directed into this system via a periscope and fiber optic that collects light from the GDS lamp that would otherwise be unused by the larger main spectrometer; thus, no light is obscured or lost from the primary spectrometer. The extension spectrometer covers the wavelength range of the best analytical lines for the group I elements (H, Li, Na, K, Rb, and Cs), as well as Oxygen and others. The strong emission lines for many of these elements are not in the nominal spectral range of the primary spectrometer. The extension spectrometer expands the analytical range for these elements.



Specifications and part numbers may change. Consult LECO for latest information.

