

## Case Study

### Elforlight Tuning Lasers in Real Time

#### The Problem

Elforlight the UK manufacturer of a range of line narrowed laser diodes designed for use as a source for Raman spectroscopy, needed to reduce the time taken to fine tune the laser diodes. Using a conventional spectrometer with scan times of minutes between each adjustment, the process is slow and tedious.

#### The Solution

Elforlight purchased the StellarNet EPP2000HR. The effects of each adjustment can be viewed in real time on the PC screen thereby saving considerable amounts of time as well as simplifying the process.

The EPP2000HR has a CCD detector with 2048 pixels. A full wavelength scan over the 100nm range takes a few milliseconds and there are no moving parts. The light from the laser source is collected via a Cosine Receptor mounted on a 2Metre fibre optic cable, and launched into the spectrometer via an SMA connector. The narrow entrance slit and grating monochromator provide high resolution of approx 0.1nm.

