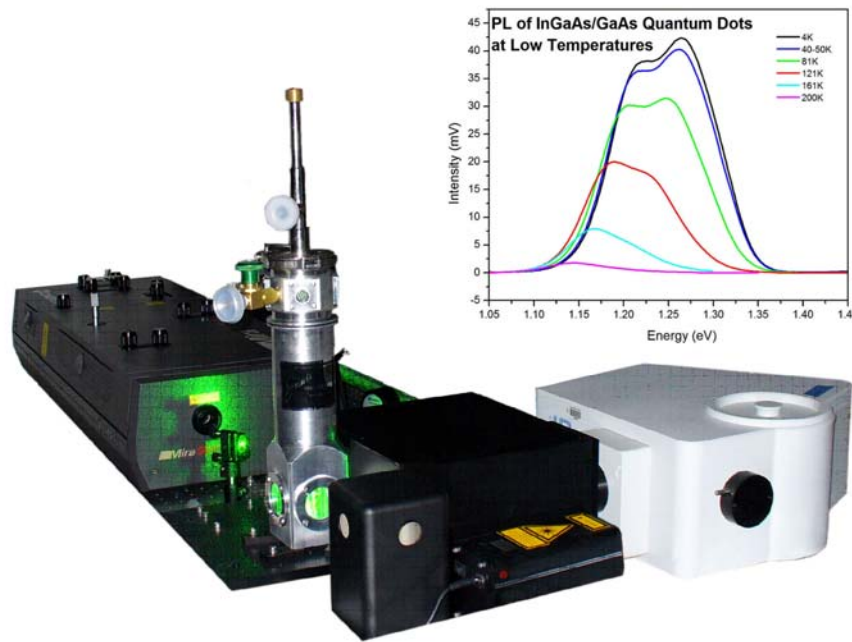


Low Temperature Photoluminescence Optical Interface

Photoluminescence spectroscopy (PL) is a powerful optical method used for characterizing materials. Temperature dependent PL measurements are particularly useful in characterizing materials containing Quantum Dots and Quantum Wells. A cryostat with two or more optical ports is often used as a cryogenic sample compartment for PL measurements.

In order to measure photoluminescence of semiconductors, there are various requirements: (a) a stable, powerful monochromatic light source, (b) optics to focus light on the sample, (c) sample holder, (d) collection optics, (e) monochromator and (f) detector for spectral analysis.



The Low Temperature PL Optical Interface from HORIBA Jobin Yvon provides a stable collection optics system, designed to collect the maximum amount of light from the sample inside either type of cryostat, and couple it efficiently into the monochromator.

The Low Temperature PL Optical Interface mounts directly on the side entrance slit of HJY standard monochromators (M-series, iHR320 and iHR550). The Low Temperature PL Optical Interface contains reflective optics for maximum light collection from a sample in a cryostat, and has adjustable legs to match the height of lasers and other optics already in the lab. It is equipped with a holder for a standard 1" notch filter, and is compatible with Janis models ST-100, CS100/202 cryostats, ARS CS202-x1ss cryostat and others. The following Optional Accessories are available: Automated Filter Wheel for four 13mm filters, with GPIB or RS-232 control; Mounting Hardware for cryostat.

Specifications:

- Compatible with all M-series, iHR320 and iHR550
- Reflective optics for maximum light collection
- Adjustable height for compatibility with standard excitation lasers and focusing optics
- Compatible with Janis models ST-100, CS100/202 cryostats, ARS CS202-x1ss cryostat and others
- Optional mounting hardware for cryostat
- Notch filter holder included (for standard 1" mounted filter)
- Optional automated filter wheel for 13mm filters, GPIB or RS-232 control
- Input f/1.5, output f/7.5
- Optical axis 102.5mm above base

Ordering Information

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|----------|--|
| 23078510 | Optical Interface for iHR320/550 and Triax320/550, mounts on lateral entrance
Two 1" (25.4mm) filter holders included |
| 23075810 | Optical Interface for M-series, mounts on lateral entrance
One 1" (25.4mm) notch filter holder included |
| 23075330 | Optional 5 position compact motorized filter wheel driven by Triax board (GPIB or RS232), holds 13mm filters, for 23075810 |

Custom Mounting hardware for cryostats available upon request, consult factory for more details.