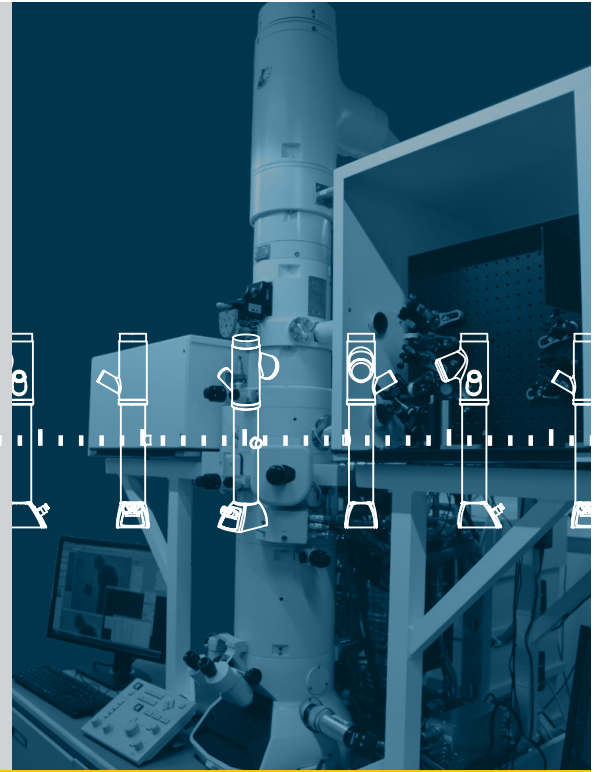




Luminary

Laser Port System



IDES' Luminary laser port system converts conventional Transmission Electron Microscopes (TEM) into powerful, time-resolved, imaging and spectroscopy tools. Luminary can integrate a wide variety of laser systems into the microscope and gives users the ability to generate precisely timed electron pulses and produce photoexcitation in the specimen.

IDES' Luminary system mounts the laser directly to the vibration isolation system of the TEM column, resulting in impressive long-term stability and allowing for straightforward optical configurations within easy reach of the user. The standard system provides two fully enclosed 1200 mm by 600 mm optical tables coupled by an enclosed beam tube at the rear of the instrument. Custom configurations are available, including larger optical tables and additional load bearing columns to accommodate lasers and optics weighing over 100 kg.

The column integrated optics are the heart of Luminary. Two optical ports deliver laser light to a set of mirrors inside the TEM column, where it is directed to the specimen and the cathode.

While the light hitting the specimen is creating dynamic conditions, the light hitting the cathode produces a pulse of electrons that then capture an image, spectrum, or diffraction pattern. The additional "CO" condenser lens couples with the standard TEM optics to allow electron pulse generation under a wide range of gun configurations and photoemission parameters.

Luminary combines with the laser system of your choice to create a powerful instrument for observing sample dynamics at femtosecond to microsecond time scales.

Features:

- » Two optical laser ports
- » Two internal mirrors
- » Vibration isolated optical tables
- » Software integration options for a variety of experimental configurations
- » Optional laser diagnostic package