GEMINI X

Microscopy Hyperspectral Imaging Module

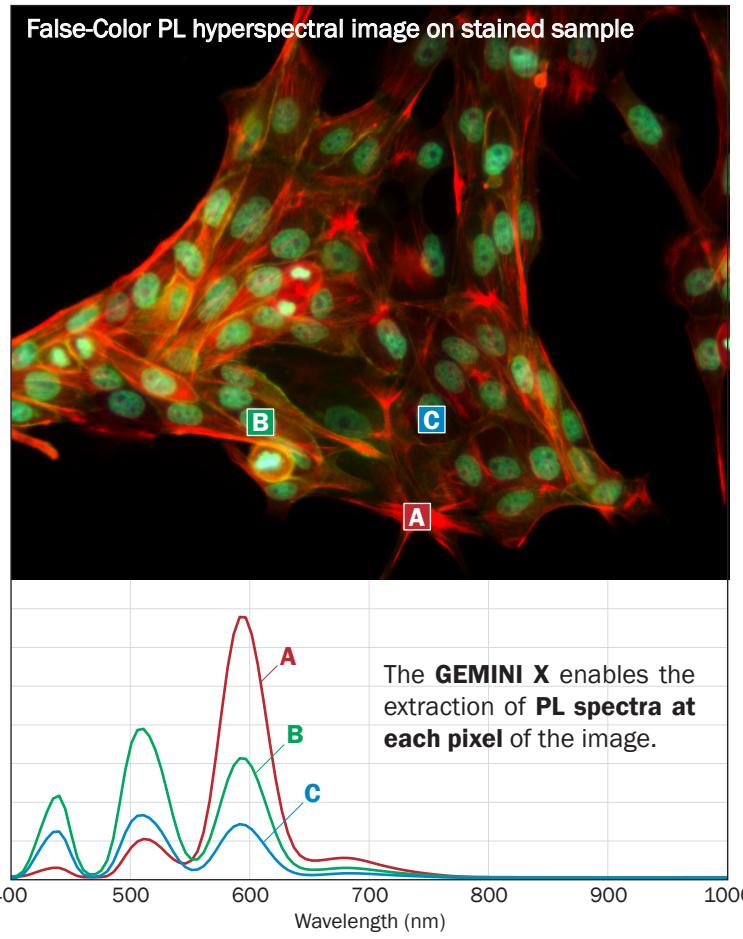
GEMINI-X Interferometer is the high-aperture evolution of the GEMINI Interferometer, **specifically developed for hyperspectral imaging applications in microscopy**.

Key Features

- Suitable for **transmission**, **reflectance**, photo- & electro-luminescence (**PL & EL**) hyperspectral imaging
- 20 mm clear aperture for seamless coupling with **large-area 2D sensors**
- **Compatible with any microscope** with a camera port
- **SDK** and **Plug & Play Software** for Hyperspectral Acquisition & Analysis
- **Compatible with TCSPC cards** for time-resolved emission spectroscopy (TRES)
- **High light throughput** for high-sensitivity measurements
- **High spectral resolution**, compact and lightweight

Applications

- Hyperspectral Imaging in Microscopy and TRES measurements
- Biology, Semiconductors, Material Science, Forensics, Art Conservation





Technical specifications

Spectral range*	400 - 1700 nm (options down to UV or in the IR available)*	
Clear Aperture		Ø 20 mm
User adjustable spectral resolution		<1 nm @ 400 nm <15 nm @ 1700 nm
Number of spectral bands		Selectable via Software**
Software Package	For Hyperspectral Imaging: Acquisition App & HyperLAB	
	For TRES measurements: TRES App (compatible with most TCSPC cards)	
Dimensions		176 × 44 × 55 mm
Weight		0.5 kg
Recommended Systemd Requirements (for optimal operation of HyperLAB)		32 GB RAM, SSD drive suggested

*The standard GEMINI-X comes with AR-coated optics in the spectral range 400–1700 nm. Alternative coatings are available for other spectral ranges. For more information, contact us at info@nireos.com.
**GEMINI-X is a FT spectroscopy based instrument and the number of extracted spectral bands can be chosen depending on the needs. Preset scan modes providing different spectral resolutions (and numbers of bands) are available in the Acquisition App software.

The GEMINI-X connects to the microscope dovetail, after the tube lens. Sufficient space must be available between the dovetail and the image focal plane to allow insertion of the GEMINI-X. For more information, contact us at info@nireos.com.

Additional Accessories

- Mechanical adapter to the microscope
- Tube for coupling with the camera



