Edmund optics | europe

2025

# APPLICATIONS SOLUTIONS BROCHURE




**+44 (0) 1904 788600 | www.edmundoptics.eu/applications**


# PRODUCTS FOR **EVERY APPLICATION**

> Edmund Optics® is proud to support applications that are enabling a better future for all of us. Harnessing the power of light, our customers develop tools and solutions that accelerate automation, see deeper than ever before, and seamlessly connect the world. With over 34,000 products, including those from some of the most trusted brands in optics, imaging, and photonics, we look forward to partnering with our customers **for a better tomorrow.**
>
> *– Gregg Fales, Director of Marketplace Product and Product Management*

## **Edmund Optics®**: Your One Stop for the Most Trusted Brands

For our most up to date new products, visit **www.edmundoptics.eu/new**.

# Short-Wave Infrared (SWIR) Imaging

**Short-Wave Infrared (SWIR) Imaging** plays a crucial role in industrial inspection, surveillance, and scientific research by revealing details invisible to the naked eye. **Edmund Optics®** offers a robust selection of SWIR-compatible components, with our **TECHSPEC® C-Series Fixed Focal Length SWIR Lenses** standing out for their exceptional image quality and broadband AR coatings that maximize transmission in the 900–1700 nm range. These lenses are ideal for high-resolution imaging in demanding environments, offering precise performance with minimal chromatic aberration. Paired with **Teledyne FLIR Forge 1GigE SWIR Cameras**, users can capture high-sensitivity SWIR imagery for applications such as semiconductor inspection or moisture detection. To enhance system flexibility, **Mounted Machine Vision Filters** help isolate specific SWIR wavelengths, improving contrast and target identification. **Effilux SWIR LED Ring Lights** provide uniform, stable illumination across the SWIR spectrum, enabling consistent imaging results. Together, these components from **Edmund Optics®** deliver the clarity, sensitivity, and stability needed to fully leverage the power of SWIR imaging.

## TECHSPEC® C Series Fixed Focal Length SWIR Lenses

- **Up to ⅔", C-Mount Lens**
- **Up to 7,5 MegaPixels, 2,8 µm Pixel Size Sensors**
- **Compact (C) SWIR Lens for 900-1700 nm Wavelength Range**
- **3,5 mm to 100 mm Focal Length**
- **Visit www.edmundoptics.eu/4445 for more information**

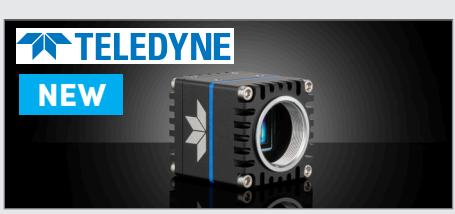
Scan Here for Application Resources!


| | |
|---|---|
| **Imaging Lens Type:** | Compact Lens |
| **Iris Option:** | Variable |
| **Wavelength Range (nm):** | 900 - 1700 |
| **Coating:** | 900 - 1700 nm BBAR |
| **Mount:** | C-Mount |
| **Coating Specification:** | 900 - 1700 nm BBAR |
| **Storage Temperature (°C):** | -20 to +60 For questions regarding operating temperature please contact our support team |

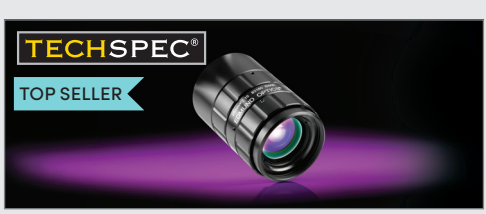
| FL (mm) | Max. Sensor Format | Aperture (f/#) | WD (mm) | Mount | Stock No. | Price |
|---|---|---|---|---|---|---|
| 3,50 | ⅛" | f/2 - f/11 | 0 - ∞ | C-Mount | #23-216 | €620,00 |
| 4,50 | ⅛" | f/2 - f/11 | 25 - ∞ | C-Mount | #23-217 | €620,00 |
| 6,00 | ⅛" | f/1,4 - f/16 | 75 - ∞ | C-Mount | #23-218 | €503,00 |
| 8,50 | ⅔" | f/1,3 - f/16 | 100 - ∞ | C-Mount | #23-219 | €503,00 |
| 12,00 | ⅔" | f/1,8 - f/16 | 100 - ∞ | C-Mount | #23-220 | €503,00 |
| 16,00 | ⅔" | f/1,6 - f/16 | 100 - ∞ | C-Mount | #23-221 | €438,00 |
| 25,00 | ⅔" | f/1,4 - f/16 | 100 - ∞ | C-Mount | #23-222 | €438,00 |
| 35,00 | ⅔" | f/1,65 - f/22 | 165 - ∞ | C-Mount | #23-223 | €438,00 |
| 50,00 | ⅔" | f/2 - f/22 | 250 - ∞ | C-Mount | #23-224 | €483,00 |
| 100,00 | ⅔" | f/2,8 - f/22 | 750 - ∞ | C-Mount | #23-225 | €595,00 |


**Effilux SWIR LED Ring Lights**
**www.edmundoptics.eu/4455**

**Mounted Machine Vision Filters**
**www.edmundoptics.eu/4298**




**Teledyne FLIR IIS Forge 1GigE SWIR Cameras**
**www.edmundoptics.eu/4616**




**TECHSPEC® SWIR Series Fixed Focal Length Lenses**
**www.edmundoptics.eu/3444**

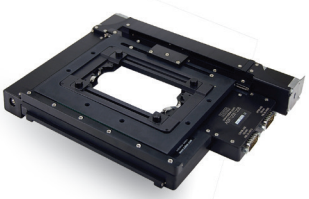
# Multiphoton Microscopy

**Multiphoton Microscopy** enables deep-tissue imaging with minimal photodamage, making it essential for neuroscience, developmental biology, and live-cell imaging. Edmund Optics supports this advanced technique with a range of precision components, notably the **Zaber™ Motorized XY Microscope Stage**, which offers automated, high-precision sample positioning for seamless image stitching and time-lapse studies. Complementing this, our **Low GDD Dichroic Shortpass Ultrafast Filters** are designed to minimize group delay dispersion, preserving pulse integrity for optimal excitation of fluorophores. For directing ultrafast laser beams with minimal loss and distortion, **TECHSPEC® Low GDD Dielectric Ultrafast Laser Mirrors** provide high reflectivity and low dispersion performance. Imaging clarity is enhanced by **Lumenera INFINITY5 Microscopy Cameras**, delivering high resolution and frame rates for capturing fine cellular details in real time. In addition, **OD8 Fluorescence Bandpass Filters** offer high transmission and excellent blocking outside the passband, enhancing image contrast and reducing background noise. Together, these components ensure accurate beam delivery, stable sample control, and high-quality image capture—working in unison to maximize the performance of multiphoton microscopy systems.

## Zaber™ Motorized XY Microscope Stage

Scan Here for Application Resources!

ZABER
Simplifying Motion Control

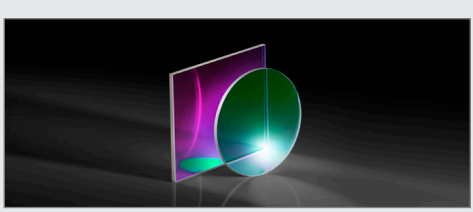


- **100 x 120 mm or 205 x 205 mm Travel**
- **100N Centered Load Capacity, 12 µm Full Travel Accuracy, 2 µm Repeatability, and Up to 85 mm/s Speed**
- **Available with Integrated, 200 Counts per Revolution (CPR) Motor Mounted Encoder**
- **Visit www.edmundoptics.eu/3692 for more information**

| | |
|---|---|
| **Resolution (µm):** | 0,15625 |
| **Repeatability (µm):** | <2 |
| **Speed (mm/s):** | 0,000095 to 85 |
| **Thrust (N):** | 95 |
| **Load Capacity (kg):** | 9,68, Centered Load |

| Travel (mm) | Encoder Resolution | Dimensions (mm) | Accuracy (µm) | Backlash (µm) | Stock No. | Price |
|---|---|---|---|---|---|---|
| **120 in X 100 in Y** | N/A | 236,3 x 322,9 | 40 (Unidirectional) | <4 | #22-630 | €7.591,10 |
| **120 in X 100 in Y** | 200 CPR | 236,3 x 322,9 | 40 (Unidirectional) | <4 | #25-178 | €9.733,50 |
| **205 in X 205 in Y** | N/A | 349,0 x 400,9 | 50 (Unidirectional) | <10 | #22-629 | €9.342,10 |
| **205 in X 205 in Y** | 200 CPR | 349,0 x 400,9 | 50 (Unidirectional) | <10 | #25-179 | €7.982,50 |


**TECHSPEC® Low GDD Dielectric Ultrafast Laser Mirrors**
**www.edmundoptics.eu/4408**



**Low GDD Dichroic Shortpass Ultrafast Filters**
**www.edmundoptics.eu/4026**


**Teledyne Lumenera INFINITY5/3/2 Microscopy Cameras**
**www.edmundoptics.eu/3740**

**OD8 Fluorescence Bandpass Filters**
**www.edmundoptics.eu/4454**

# Quantum Computing

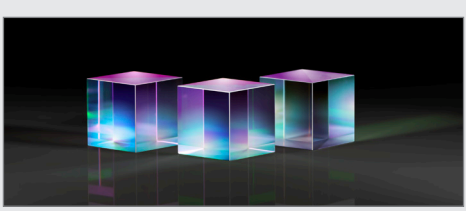
**Quantum Computing** relies heavily on precise optical components to manipulate and measure quantum states with extreme accuracy. **Edmund Optics®** supports this field with high-performance products, particularly our **Polarization Maintaining Fiber Optic Patchcords**, which are essential for preserving signal integrity in quantum communication and interferometry systems. These patchcords ensure stable polarization, a critical factor for minimizing decoherence in quantum states. Complementing these are the **Polarizing Cube Beamsplitters for Quantum Computing**, which provide high extinction ratios for accurate beam separation—vital in quantum logic gates and photon routing. For laser alignment and beam steering, **Edmund Optics®** offers **Ultraprecision Kinematic Mounts**, enabling the sub-micron stability required in quantum setups. Our **Single Frequency Turnkey Lasers** deliver narrow linewidths and low phase noise, making them reliable for initializing and manipulating qubits. Finally, **Half-Waveplates for Quantum Computing** allow for fine polarization adjustments, contributing to precise control over quantum information processing. Together, these components form a base for an integrated optical platform that ensures the stability, precision, and control required for scalable quantum computing applications.

## Polarization Maintaining Fiber Optic Patchcords

- **FC/PC, FC/APC, and Hybrid Terminated Connectors**
- **Patchcords for Wavelengths from 460 – 1625 nm**
- **Polarization Extinction Ratios up to 25dB**
- **1 m and 2 m Standardized Lengths Available**
- **Visit www.edmundoptics.eu/4421 for more information**

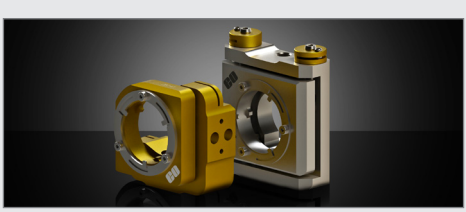
Scan Here for Application Resources!

| Wavelength Range (nm) | Mode Field Diameter (nm) | NA | Connector | Length (m) | Stock No. | Price |
|---|---|---|---|---|---|---|
| 460 - 700 | 3,3 ± 0,5 µm @ 515 nm | 0,12 | FC/APC | 1 | #25-979 | €242,00 |
| 620 - 850 | 4,5 ± 0,5 µm @ 630 nm | 0,12 | FC/APC | 1 | #25-977 | €213,00 |
| 770 - 1100 | 5,3 ± 1,0µm @ 850 nm | 0,12 | FC/APC | 1 | #25-975 | €189,00 |
| 970 - 1550 | 6,6 ± 0,5 µm @ 980 nm | 0,12 | FC/APC | 1 | #25-973 | €191,00 |
| 970 - 1550 | 6,6 ± 0,5 µm @ 980 nm | 0,12 | FC/APC | 1 | #25-971 | €191,00 |
| 1270 - 1625 | 9,3 ± 0,5 µm @ 1300 nm | 0,12 | FC/APC | 1 | #25-969 | €177,00 |
| 1440 - 1625 | 10,1 ± 0,4 µm @ 1550 nm | 0,125 | FC/APC | 1 | #25-967 | €191,00 |

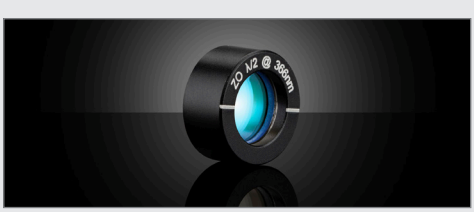


**Polarizing Cube Beamsplitters for Quantum Computing**
**www.edmundoptics.eu/4615**

**Single Frequency Turnkey Lasers**
**www.edmundoptics.eu/4330**



**Ultraprecision Kinematic Mounts**
**www.edmundoptics.eu/4474**




**Half Waveplates for Quantum Computing**
**www.edmundoptics.eu/4554**

# Factory Automation

**Factory automation** relies heavily on precise, high-speed imaging systems to ensure quality control, process efficiency, and reduced downtime. Edmund Optics®' **TECHSPEC® CR Series Fixed Focal Length Lenses** are engineered for high-resolution imaging and minimal distortion, making them ideal for critical inspection tasks such as part alignment, defect detection, and barcode reading. These lenses provide exceptional performance in demanding environments, especially when paired with **FLIR Blackfly S PoE GigE Cameras**, which deliver fast, reliable image capture over industrial networks. To improve image contrast and eliminate glare from reflective surfaces like metal or plastic, **Mounted Machine Vision Glass Linear Polarizers** can be easily integrated into vision systems. Advanced **Illumination's Long Working Distance High-Intensity Spot Lights** ensure bright, even illumination in hard-to-reach areas, enhancing system consistency and accuracy. For more compact setups or applications with space constraints, Edmund Optics' **UCR Series Fixed Focal Length Lenses** offer a rugged, space-saving alternative without compromising optical quality. Altogether, this suite of products supports scalable, high-performance imaging solutions tailored to modern factory automation needs.

## TECHSPEC® Cr Series Fixed Focal Length Lenses

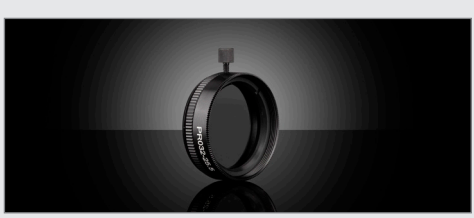
Scan Here for Application Resources!

- **Up to ⅔", C-Mount Lens**
- **Up to 7,5 MegaPixels, 2,8 µm Pixel Size Sensors**
- **Ruggedized (Cr) Designs (50 g Shock) of our C Series Lens**
- **3,5 mm to 50 mm Focal Length**
- **Instrumentation (Ci) Versions Also Available**
- **Visit www.edmundoptics.eu/3793 for more information**

| | |
|---|---|
| **Aperture (f/#)** | f/2.8 |
| **Mount** | C-Mount |

| FL (mm) | Max. Sensor Format | WD (mm) | Max Distortion (%) | Stock No. | Price |
|---|---|---|---|---|---|
| 3,50 | ¹⁄₁,₈" | 0 - ∞ | -20,95 | #37-393 | €485,00 |
| 4,50 | ¹⁄₁,₈" | 25 - ∞ | -15,83 | #37-399 | €485,00 |
| 6,00 | ¹⁄₁,₈" | 75 - ∞ | -6,82 | #35-141 | €410,00 |
| 8,50 | ⅔" | 100 - ∞ | -18,51 | #36-840 | €310,00 |
| 12,00 | ⅔" | 98 - ∞ | -2,09 | #35-156 | €310,00 |
| 16,00 | ⅔" | 98 - ∞ | -0,77 | #35-165 | €310,00 |
| 25,00 | ⅔" | 98 - ∞ | 0,21 | #35-174 | €310,00 |
| 35,00 | ⅔" | 165 - ∞ | 0,17 | #35-183 | €310,00 |
| 50,00 | ⅔" | 250 - ∞ | 0,26 | #35-191 | €410,00 |
| 100,00 | 1" | 750 - ∞ | 0,866 | #15-521 | €475,00 |


**Teledyne Imaging FLIR/IIS Blackfly S PoE GigE Cameras**
**www.edmundoptics.eu/3887**



**Mounted Machine Vision Glass Linear Polarizers**
**www.edmundoptics.eu/4306**


**Advanced Illumination Long Working Distance High Intensity Spot Lights**
**www.edmundoptics.eu/4202**

**TECHSPEC® UCr Series Fixed Focal Length Lenses**
**www.edmundoptics.eu/4618**

# Flow Cytometry

**Flow Cytometry**, a technique crucial for cell sorting, biomarker detection, and immunophenotyping, demands highly stable and precise optical components to ensure accurate measurements. **Coherent High Performance OBIS Laser Systems** are especially valuable in this context, offering plug-and-play, wavelength-stabilized laser sources with exceptional beam quality and low noise—ideal for multi-parameter fluorescence detection. To isolate specific fluorescence signals with minimal background interference, **Hard Coated OD5 Bandpass Filters** provide steep edges and high transmission, supporting clean signal separation even in complex multicolor experiments. **Olympus X Line Extended Apochromat Objectives** enhance image clarity and resolution with superior chromatic correction, improving the precision of optical interrogation in flow systems. For sensitive detection across visible and SWIR ranges, the **NIREOS SPIDER High Dynamic Range VIS-SWIR Photodetector** offers broad spectral response and high linearity, critical for accurately capturing weak or variable fluorescence signals. Additionally, **TECHSPEC® Dichroic Laser Beam Combiners** efficiently merge multiple laser lines with minimal loss, optimizing the excitation path in compact, multi-laser flow cytometry setups. These components from **Edmund Optics®** together ensure reliable, high-throughput performance for advanced flow cytometry applications.

## Coherent® High Performance OBIS™ LX/LS Laser Systems

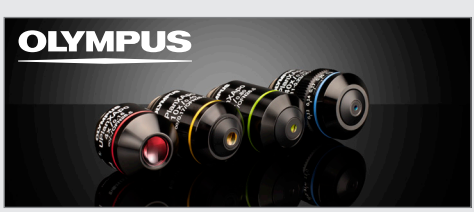
- **Same Compact Design for All Wavelength Options**
- **Integrated Control Electronics with Analog and Digital Modulation**
- **Circular Beam with Superior Beam Quality**
- **Coherent® High Performance OBIS™ LX/LS Fiber-Pigtailed Laser Systems Also Available**
- **Visit www.edmundoptics.eu/3613 for more information**

Scan Here for Application Resources!

| | |
|---|---|
| **Polarization:** | 100:1 |
| **Spatial Mode:** | $TEM_{00}$ |
| **Power Supply:** | Power Supply Required and Sold Separately:<br>USA: #87-473<br>Europe: #87-473<br>Japan: #87-473<br>Korea: #87-473<br>China: #87-473 |
| **Manufacturer:** | Coherent® |
| **Output Type:** | Free Space |
| **Type of Laser:** | Diode |
| **Laser Class - CDRH:** | IIIb |

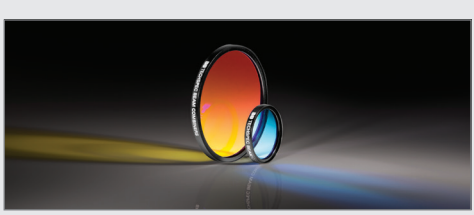

| Wavelength (nm) | Output Power (mW) | Beam Diameter (mm) | RMS Noise | Stock No. | Price |
|---|---|---|---|---|---|
| **405** | 100 | 0,8 | ≤0,05% (20 Hz to 20 MHz) | #87-456 | €5.407,50 |
| **488** | 100 | 0,7 | ≤0,25% (20 Hz to 20 MHz) | #88-025 | €8.347,50 |
| **532** | 100 | 0,7 | ≤0,25% (20 Hz to 20 MHz) | #12-347 | €8.925,00 |
| **561** | 100 | 0,7 | ≤0,25% (20 Hz to 20 MHz) | #34-232 | €10.237,50 |
| **640** | 100 | 0,8 | ≤0,05% (20 Hz to 20 MHz) | #87-466 | €2.619,75 |

**Hard Coated OD5 Bandpass Filters**
**www.edmundoptics.eu/4617**




**Olympus X-Line Extended Apochromat Infinity Corrected Objectives**
**www.edmundoptics.eu/4080**


**NIREOS SPIDER High-Dynamic Range VIS-SWIR Photodetector**
**www.edmundoptics.eu/4470**



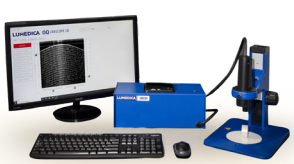
**TECHSPEC® Dichroic Laser Beam Combiners**
**www.edmundoptics.eu/3466**

# Optical Coherence Tomography (OCT)

**Optical Coherence Tomography (OCT)** is a non-invasive imaging technique widely used in ophthalmology, cardiology, and material inspection for its ability to generate high-resolution, cross-sectional images of internal structures. **Edmund Optics®** offers the **Lumedica OCT Imaging System**, a compact and cost-effective solution that delivers high-quality imaging performance, making advanced OCT accessible for both research and clinical use. For dynamic beam steering and rapid scanning, **ScannerMAX Saturn Galvanometer Optical Scanners** provide precise, high-speed motion control, essential for real-time OCT imaging. To ensure operator safety during laser-based procedures, **Laser Safety Eyewear** from **Edmund Optics®** offers certified protection tailored to common OCT wavelengths. For system calibration and performance verification, **Optical Coherence Tomography (OCT) Phantoms** provide reliable, tissue-mimicking structures that help validate resolution and penetration depth. Additionally, **TECHSPEC® Gold Off-Axis Parabolic Mirrors** support efficient, aberration-free light collection and focusing, critical for maintaining image fidelity in broadband OCT systems. Together, these components offer a robust foundation for building or enhancing OCT systems across a range of biomedical and industrial applications.

## Lumedica OCT Imaging System

Scan Here for Application Resources!

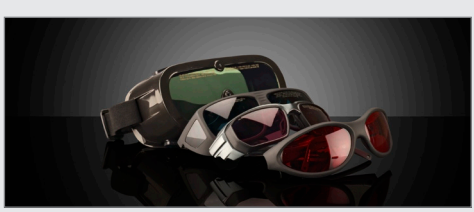


- **Affordable Optical Coherence Tomography Imaging System**
- **Ideal for Biological Sample Imaging, Sample Characterization, and OCT Education**
- **Compact Form Factor Tabletop Device**
- **Visit www.edmundoptics.eu/3831 for more information**

| | |
|---|---|
| **Weight (lbs):** | 6 |
| **Weight (kg):** | 2,72 |
| **Dimensions (mm):** | System: 413 x 216 x 153 Scanner: 41 x 172 x 67 |
| **Image Size (Pixels):** | 512 x 512 |
| **Sensitivity (OSNR):** | 100 dB |

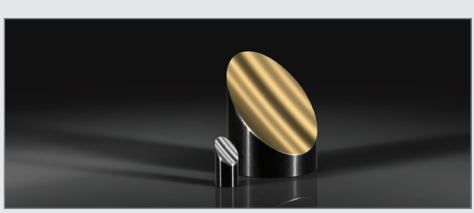
| Type | CWL (nm) | Depth Resolution (µm) | Transverse Resolution (µm) | Linear Scan Angle | A-Scan Line Rate (lines/second) | B-Scan Image Rate (lines/second) | Stock No. | Price |
|---|---|---|---|---|---|---|---|---|
| **Lumedica OQ LabScope 3.0 OCT Imaging System** | 840 | Air: 8 Tissue: 6 | 18 | 7 mm | 34000 | 22 | #29-143 | €12.000,00 |
| **Lumedica OQ Lab-Scope 3.0 /R OCT Imaging System** | 860 | Air: 5 Tissue: 3 | 18 | 7 mm | 34000 | 22 | #29-144 | €18.000,00 |
| **Lumedica OQ StrataScope OCT Imaging System** | 1310 | Air: 14 Tissue: 10 | 20 | 8 mm | 16000 | 11 | #29-145 | €20.000,00 |


**ScannerMAX Saturn Galvanometer Optical Scanners**
**www.edmundoptics.eu/4131**



**Laser Safety Glasses and Goggles**
**www.edmundoptics.eu/3963**

**Optical Coherence Tomography (OCT) Phantoms**
**www.edmundoptics.eu/4543**



**Optical Coherence Tomography (OCT) Phantoms**
**www.edmundoptics.eu/3900**

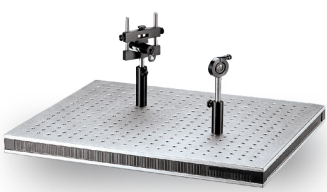
# Scientific Research

**Scientific Research** across universities, national labs, and industrial settings demands precision, stability, and flexibility from optical and photonics components. **Composite Breadboard Laboratory Tables** provide the vibration isolation and thermal stability essential for high-sensitivity experiments across diverse environments. For researchers setting up new workstations, **Lab Starter Kits** offer a convenient and cost-effective selection of optical mounts, posts, and hardware essential for rapid prototyping and experimental configuration. In applications requiring tight focus and minimal aberration, **TECHSPEC® High Precision Aspheric Lenses** deliver superior optical performance, enhancing imaging and beam shaping across wavelengths. The **Fiber-Coupled Laser Driven White Light Source** supports spectroscopy and calibration with high brightness and long-term output stability, critical in both diagnostic and materials research. Precise sample positioning is achieved with **TECHSPEC® Crossed Roller Bearing Single Axis Translation Stages (Thru-Hole Model)**, which ensure low-friction, high-load-capacity motion control for scanning and alignment applications. **Edmund Optics®** supports a wide range of research needs, enabling innovation and discovery in optics, photonics, biology, materials science, and beyond.

## TMC™ CleanTop® Optical Honeycomb Breadboards

- **Stainless Steel**
- **Economically Priced**
- **Lightweight Design**
- **Visit www.edmundoptics.eu/1446 for more information**

| | |
|---|---|
| **Thickness (mm):** | 50,00 |
| **Construction:** | Stainless Steel (400 Series) Top and Bottom Plates, Plated Steel Honeycomb Core, High Pressure Laminate Core Sidewalls |
| **Core Cell Area (cm²):** | ≤3 |
| **Flatness (mm):** | 0,13 |



Scan Here for Lab Support!

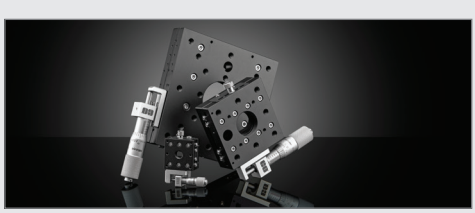
TMC™ VIBRATION CONTROL

| Width (mm) | Length (mm) | Weight (kg) | Mounting Threads | Stock No. | Price |
|---|---|---|---|---|---|
| **450,0** | 600,0 | 14,0 | (352) M6 Tapped on 25 mm Centerlines, on 37,5 mm Corners | #55-227 | €1.287,50 |
| **450,0** | 1200,0 | 28,0 | (736) M6 Tapped on 25 mm Centerlines, on 37,5 mm Corners | #55-243 | €1.648,00 |
| **600,0** | 600,0 | 17,0 | (484) M6 Tapped on 25 mm Centerlines, on 37,5 mm Corners | #55-250 | €1.400,80 |
| **600,0** | 900,0 | 25,0 | (748) M6 Tapped on 25 mm Centerlines, on 37,5 mm Corners | #55-251 | €1.637,70 |
| **600,0** | 1200,0 | 34,0 | (1012) M6 Tapped on 25 mm Centerlines, on 37,5 mm Corners | #55-252 | €1.859,15 |

**Lab Starter Kits**
**www.edmundoptics.eu/3788**

**TECHSPEC High Precision Aspheric Lenses**
**www.edmundoptics.eu/3991**

**Fiber Coupled Laser-Driven White Light Source**
**www.edmundoptics.eu/4336**



**Crossed-Roller Bearing Linear Translation Stages (Thru-Hole Model)**
**www.edmundoptics.eu/3942**

# Free Space Optical Communication

**Free Space Optical Communication** systems require precise beam control, alignment stability, and high-quality optics to ensure reliable data transmission across long distances. **Edmund Optics®' Large Diameter Gimbal Optical Mirror Mounts** are especially well-suited for these systems, offering robust, high-precision angular adjustment for large optics–critical for maintaining accurate beam direction in outdoor or mobile FSO setups. To focus or collimate beams with minimal aberration, **TECHSPEC® Precision Parabolic Mirrors** provide excellent reflectivity and wavefront accuracy, enhancing signal strength and reducing dispersion. **TECHSPEC® Draconis Broadband Beam Expanders** enable flexible control of beam diameter across a wide spectral range, supporting long-range propagation and atmospheric compensation. For compact and efficient light sources, **Fiber-Coupled Benchtop Laser Systems** deliver stable, narrow-linewidth output ideal for modulated transmission in FSO links. Additionally, **Optotune Beam Steering Mirrors** allow for rapid, programmable beam adjustments without mechanical motion, supporting dynamic tracking and adaptive alignment. These components from **Edmund Optics®** provide the optical precision and reliability necessary for advancing FSO communication technologies in defense, aerospace, and next-generation telecom networks.

## Large Diameter Gimbal Optical Mirror Mounts

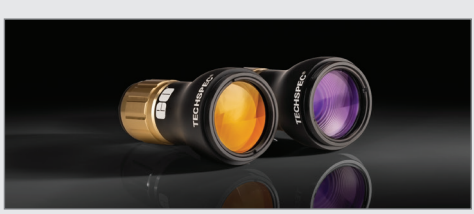
Scan Here for Application Resources!

- **Gimbal Movement for Precision Tip and Tilt Alignment**
- **Compatible with 4", 4,25", 6", 8", 10" and 12" Diameter Optics**
- **Designed for Flat Mirrors**
- **Direct Mounting to English and Metric Breadboards for System Integration**
- **Precision Gimbal Mounts for Smaller Optics Also Available**
- **Visit www.edmundoptics.eu/4242 for more information**

| | |
|---|---|
| **Type of Optics:** | Circular |
| **Optic Holding Style:** | Three Spring-Loaded Clips |
| **Type of Adjustment Screws:** | Micrometer |

| Size of Compatible Optics (mm) | Size of Compatible Optics (inches) | CA (mm) | Max. Thickness of Compatible Optics (mm) | Optical Axis Height (inches) | Optical Axis Height | Fine Tilt Angle (°) | Fine Tip Angle (°) | Stock No. | Price |
|---|---|---|---|---|---|---|---|---|---|
| 100,00 - 101,60, 108,00 | 4 / 4,25 | 92,0 | 20 | 3,50 | 88,90 | ±6,0 | ±6,0 | #17-410 | €2.111,50 |
| 152,40 | 6 | 140,0 | 30 | 4,50 | 114,30 | ±4,5 | ±4,5 | #17-411 | €2.626,50 |
| 203,20 | 8 | 190,0 | 40 | 6,25 | 158,80 | ±6,5 | ±6,5 | #17-412 | €3.759,50 |
| 254,00 | 10 | 248,8 | 55 | 8,00 | 203,20 | ±5,0 | ±5,0 | #72-333 | €4.995,50 |
| 304,80 | 12 | 298,8 | 55 | 9,00 | 228,60 | ±4,0 | ±4,0 | #72-334 | €6.128,50 |


**TECHSPEC® Precision Parabolic Mirrors**
**www.edmundoptics.eu/1660**



**TECHSPEC®Draconis Broadband Beam Expanders**
**www.edmundoptics.eu/2938**


**Fiber-Coupled Benchtop Laser Systems**
**www.edmundoptics.eu/4550**


**Optotune Fast Steering Mirrors**
**www.edmundoptics.eu/4054**

# Semiconductor Inspection

**Semiconductor Inspection** requires ultra-precise imaging and optical components capable of resolving sub-micron defects and features. **Mitutoyo NIR, NUV, and UV Infinity-Corrected Objectives** are specifically designed for high-resolution imaging across a wide spectral range, making them ideal for front-end and back-end wafer inspection in the near-infrared, near-ultraviolet, and deep ultraviolet regimes. These objectives offer long working distances and exceptional chromatic correction, critical for maintaining accuracy in non-contact inspection setups. Supporting optical path integrity, **TECHSPEC® Precision Optical Flat Mirrors** ensure minimal distortion and high surface accuracy, enabling stable beam steering and reflection in metrology systems. **TECHSPEC® Silicon (Si) Windows** are excellent for IR-based inspection methods, offering high transmission and durability for harsh semiconductor environments. For advanced imaging or spectral analysis, **TECHSPEC® High Performance ReflX Objectives** provide excellent reflectance and resolution, especially in systems requiring minimal chromatic aberration. Additionally, **Coherent LightSmyth™ Transmission Diffraction Gratings** offer high efficiency and precision for applications like spectroscopic inspection and overlay metrology. Together, these components form a robust optical foundation for high-throughput, high-accuracy semiconductor inspection systems.

## Mitutoyo NIR, NUV, and UV Infinity Corrected Objectives

- **Ideal for Bright Field Imaging in UV, Visible, and NIR Spectral Regions**
- **Excellent Performance at Nd:YAG Laser Lines**
- **Broad Spectral Ranges**
- **Visit www.edmundoptics.eu/1950 for more information**

| | |
|---|---|
| **Compatible Cover Glass Thickness (mm):** | N/A |
| **Mounting Threads:** | M26 x 36 TPI |
| **Compatible Tube Lens Focal Length (mm):** | Focal Length: 200 mm |
| **Operating Temperature (°C):** | -5 to +45 |
| **Operating Humidity:** | 20 - 80% |
| **Manufacturer:** | Mitutoyo |
| **Immersion Liquid:** | N/A |

Scan Here for Application Resources!

Mitutoyo

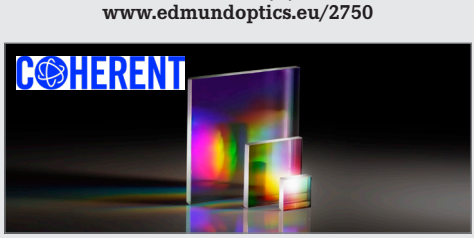
TOP SELLER

| Model Number | Magnification | NA | FL (mm) | WD (mm) | Maximum Diameter (mm) | Length excluding Threads (mm) | Mounting Threads | Wavelength Range (nm) | Stock No. | Price |
|---|---|---|---|---|---|---|---|---|---|---|
| **378-822-5** | **5X** | 0,14 | 40 | 37,5 | **34,0** | 57,5 | M26 x 36 TPI | 480 - 1800 | #46-402 | €2.014,00 |
| **378-823-15** | **10X** | 0,26 | 20 | 30,5 | **34,0** | 64,5 | M26 x 36 TPI | 480 - 1800 | #46-403 | €2.305,50 |
| **378-824-16** | **20X** | 0,40 | 10 | 20,0 | **34,0** | 75 | M26 x 36 TPI | 480 - 1800 | #46-404 | €4.038,60 |
| **378-825-16** | **50X** | 0,42 | 4 | 17,0 | **34,0** | 78 | M26 x 36 TPI | 480 - 1800 | #46-405 | €4.621,60 |
| **378-863-5** | **50X** | 0,65 | 4 | 10,0 | **39,0** | 85 | M26 x 36 TPI | 480 - 1800 | #56-982 | €11.246,60 |
| **378-826-15** | **100X** | 0,50 | 2 | 12,0 | **34,0** | 83 | M26 x 36 TPI | 480 - 1800 | #46-406 | €6.731,00 |
| **378-864-15** | **100X** | 0,70 | 2 | 10,0 | **39,0** | 85 | M26 x 36 TPI | 480 - 1800 | #56-983 | €11.140,60 |
| **378-864-5** | **100X** | 0,70 | 2 | 10,0 | **39,0** | 85 | M26 x 36 TPI | 480 - 1800 | #75-053 | €13.541,50 |


**TECHSPEC® Precision Optical Flat Mirrors**
**www.edmundoptics.eu/1669**


**TECHSPEC® Silicon (Si) Windows**
**www.edmundoptics.eu/2750**


**TECHSPEC® High Performance ReflX Objectives**
**www.edmundoptics.eu/2965**




**Coherent® LightSmyth™ Transmission Diffraction Gratings**
**www.edmundoptics.eu/4150**

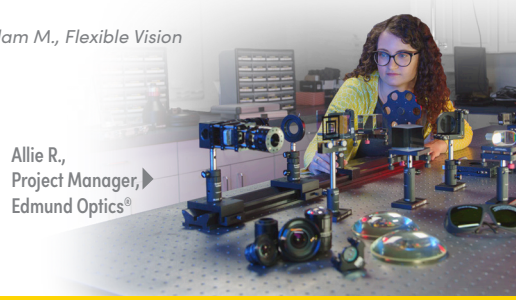
◆ CUSTOMER NUMBER

INNOVATION STARTS HERE.

# LET'S SHAPE THE FUTURE TOGETHER.

"By partnering with Edmund Optics® for all of our machine vision lenses, we are able to consistently deliver high-quality images that meet the **wide variety of applications** our customers bring to us. The quality of their products and expert support takes the guesswork out of specifying components. By standardizing on high-quality lenses, we are free to focus on other things, knowing that we have the best possible optics for our projects."

*- Adam M., Flexible Vision*



Allie R.,
Project Manager,
Edmund Optics®

We have locations in **12 countries**, **9 factories**, **10 global distribution centers**, **4 world class imaging centers**, and **over 1.250 employees**. With global locations, local support, and product availability, Edmund Optics® is here to help. Contact one of our in-region engineers, who have a wide range of customer and application experience to solve your unique application needs.

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