

DIC DIGITAL MICROSCOPE

BUILD THE SYSTEM YOU NEED

Our Differential Interference Contrast (DIC) Digital Microscope is just one example of what can be built using components featured in the Edmund Optics® catalog. Constructed using the TECHSPEC® Optical Cage System and fitted with components designed by Edmund Optics®, Mitutoyo, and other industry leading manufacturers, the microscope can be adjusted for an application's image capture requirements.

A DIC microscope can be used to enhance the contrast of object features that are otherwise difficult to observe using traditional microscopy techniques. The DIC microscope shown in our demo uses reflected light illumination to view opaque samples, and is equipped with a 1,3 MP color camera to capture low noise, high dynamic range images. A similar transmitted light DIC microscope can also be built, which illuminates the sample from below and observes it from above, (or vice versa). Typical DIC applications include characterizing standard and super-polished optical surfaces, evaluating laser damage to coatings or substrate surfaces, monitoring process defects in thin films, inspecting semiconductors and electronics, and examining unstained biological samples.

FEATURED STOCK PRODUCTS

TECHSPEC® Optical Cage System

- Limitless Customization and Adaptability
- Designed for Easy Mechanical Alignment Around a Common Optical Axis

TECHSPEC® Crossed Roller Translation Stages

- High Accuracy, Rigidity, and Load Capacity
- Configurable into Multi-Axis Arrangements

Point Grey Blackfly™ PoE GigE Camera

- Ultra-Compact Design
- Power-Over-Ethernet for Maximum Flexibility

Metaphase Fiber Optic LED Illuminator

- Variable Intensity White LEDs
- Compact Footprint (6,4 x 4,1 x 6,0 inches)

READY TO BUILD YOUR OWN?



Scan here
to learn more!



FEATURED STOCK PRODUCTS

TECHSPEC® OPTICS		www.edmundoptics.eu/optics
Description	Stock Number	
TECHSPEC® 25 mm VIS, Non-Polarizing Cube Beamsplitter	#47-009	
TECHSPEC® 25 mm Diameter, 0,66 Numerical Aperture, VIS Coated Aspheric Lens	#49-101	

TECHSPEC® TRANSLATION STAGES		www.edmundoptics.eu/stages
Description	Stock Number	
TECHSPEC® 70 mm, Side Drive, Solid Top, English Extended Micrometer Stage	#66-431	
TECHSPEC® 70 mm, Center Drive, Through-Hole, English Extended Micrometer Stage	#66-440	
TECHSPEC® 125 mm, Side Drive, Solid Top, English Extended Micrometer Stage	#66-455	
TECHSPEC® 125 mm, English Micrometer Z-Stage	#66-508	
TECHSPEC® 125 mm, English Rotary Stage	#66-518	

TECHSPEC® CAGE SYSTEM		www.edmundoptics.eu/cage-systems
Description	Stock Number	
TECHSPEC® 30 mm Standard Cage Plate with M6 Threading for Post Mounting	#85-630	
TECHSPEC® 2" Square Interface Plate	#85-737	
TECHSPEC® 30 mm Cage 25/25,4 mm Diameter Thick Lens Mount	#85-588	
TECHSPEC® 25 mm Cage C-Mount Adapter Plate	#87-419	

MITUTOYO OBJECTIVE		www.edmundoptics.eu/objectives
Description	Stock Number	
20X Mitutoyo Plan APO Infinity-Corrected Long WD Objective	#46-145	

POINT GREY CAMERA		www.edmundoptics.eu/cameras
Description	Stock Number	
Point Grey 1/3" Blackfly™ GigE Color Camera (BFLY-PGE-14S2C-CS)	#88-047	

METAPHASE ILLUMINATION		www.edmundoptics.eu/illumination
Description	Stock Number	
Metaphase Fiber Optic LED Illuminator	#86-437	