

PRODUCT DATASHEET

RGB COLOR FILTER

Produce High-Quality
Color Images with
QImaging
Monochrome CCD
Cameras

The **RGB Color Filter** modules are designed for use with Qlmaging's line of high-resolution monochrome CCD cameras to capture high-quality color images. Color information is captured by sequentially acquiring full-resolution images in each of the color planes. The filter is switched through its red, green, and blue states under direct control of the camera hardware. The camera hardware provides highly synchronized and precise timing to the filter module. The result is artifact-free imaging at frame rates much faster than most mechanically selected filters and acousto-optical or liquid-crystal filters that require software control. White balance is controlled easily through software. The **RGB Color Filter** is connected to the camera's electronics with a single cable.

RGB Color Filter Modules for High-Resolution Color Images







RGB-MC-O (slider module) Olympus



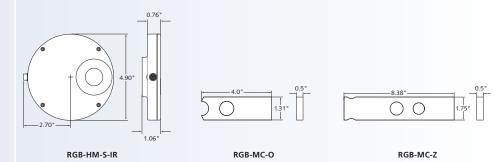


RGB-MC-Z (slider module)
Zeiss

| features | benefits |
|---|--|
| Liquid-Crystal Filter Element | High-quality color images with high-resolution monochrome CCD cameras Filter color changes with no moving parts No vibration No optical-registration problems |
| Single-Cable Connection to QImaging Cameras | Easy to install & useControlled by Qlmaging cameras |
| Sequential Acquisition of Color | ■ Full-resolution image in each color plane |
| Provides Color Even When Camera is in Binning Modes | ■ High sensitivity & speed |
| Filter Element Easily Slides out of Optical Path (Slider Modules) | ■ Enables quick switch between full-color imaging & high-sensitivity monochrome imaging without refocusing |
| Hot-Mirror Filter | ■ Integrated filtering of infrared light provides better color fidelity |

RGB Color Filter Specifications

| Color States | Red, green, blue |
|-----------------------|--|
| Transmission | 30% minimum* |
| Maximum Optical Input | 500 mW/cm ² |
| Module Control | Camera-controlled functionality |
| Temperature Range | 10 to 45°C |
| Optical Mount | Slider modules or Nikon® F-mount (C-mount to camera) |



applications

- Brightfield Microscopy
- Fluorescence Microscopy
- Pathology, Histology, & Cytology
- = FISH
- DNA Analysis
- Metallurgical Microscopy
- Forensic Analysis

filter formats

RGB Color Filter (Slider Modules)

Sliders allow easy switching between color and monochrome imaging.

Model: RGB-HM-S-IR

This module has three positions:

- (1) Color filter element enables rapid switching between red, green, and blue
- (2) IR filter element filters out IR wavelengths to allow better color fidelity
- (3) Clear glass element

Model: RGB-MC-O

This module (for Olympus® BX and IX series microscopes) slides easily in and out of the optical path through the nosepiece.

Model: RGB-MC-Z

This module (for Carl Zeiss® Axioplan® microscopes) slides easily in and out of the optical path through the analyzer slot.



