

Dual-Channel, Full-Field, Simultaneous-Imaging System

The Photometrics® DC2™ enables two-channel simultaneous imaging based on two distinct wavelengths or polarizations. Each channel is projected onto an individual CCD. Simultaneous multichannel imaging is essential to achieve quantitative emission ratiometric imaging.

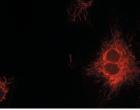
Features

- Simultaneous acquisition of two full-field emission images
- Emission can be separated by wavelength, polarization, or amplitude
- Increases scanning speeds by a factor of two in high-content screening applications
- Easily mounts to most microscopes
- Improved adjustment control enables easier image alignment
- Exchangeable filter cube allows multiple applications to be run with minimal realignment
- Bypass mode allows user to send all of the emission light to a single camera
- · Integrated, adjustable CCD mask minimizes ghosting
- Independent focus adjustment for each camera
- Works with many Photometrics[®] and QImaging[®] cameras*

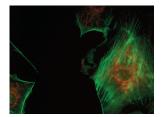
*As some combinations of microscopes and objectives, particularly in some newer Olympus and Zeiss stand/objective configurations, have displayed vignetting, it is recommended that the DC2 be tested for compatibility with your system. Please contact your local representative to verify compatibility with specific cameras.







Color Overlay



| DC2 Specifications | |
|--------------------------|---|
| Wavelength sensitivity | 400 to 750 nm |
| Efficiency per image* | 88 to 92% |
| Operation temperature | 10 to 37°C |
| Detector attachment | C-mount (male) |
| Front attachment | C-mount (female) |
| External mounting option | 14-20 tapped hole on back of unit |
| Dimensions | 6.5" at widest point x 8.5" height |
| Weight | 4.8 lbs |
| Filters | Emission/barrier, neutral density, polarization; 1" (25.4-mm) max diameter; 0.39" (9.9-mm) max thickness |
| Patents | USA: 5,926,283 and 5,982,497; Australia: 731,476; Canada: 2,294,840; Other foreign patents pending |

^{*} Transmission values are also modified by filter transmission.

Note: All specifications are typical and subject to change.

Applications

- Fluorescence resonance energy transfer (FRET) imaging
- Calcium imaging with fluo-3/Fura Red[™] (Molecular Probes) or dual-emission indo-1 imaging
- Fluorescence polarization/anisotropy imaging
- Simultaneous fluorescence/DIC imaging
- Drug discovery with Cy3/Cy5
- Single-molecule fluorescence (SMF) imaging
- pH imaging with SNARF
- Multiwavelength total internal reflection fluorescence (TIRF) imaging
- Voltage sensing with di-4-ANEPPS
- Fluorescence in situ hybridization (FISH) imaging
- cAMP imaging with FICRhR
- Multichannel confocal microscopy when used in conjunction with a spinning-disk confocal

