

RICOH

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5 Megapixel Lenses

This series are designed to match the requirements of highly developed machine vision systems. The lenses are not only optimised for high image quality, but also for heavy duty industrial operation.



FL-CC0814-5M

- 5M
- Format 2/3"
- f=8.0 mm
- F1.4 - 16



FL-CC1614-5M

- 5M
- Format 2/3"
- f=16.0 mm
- F1.4 - 16



FL-CC2514-5M

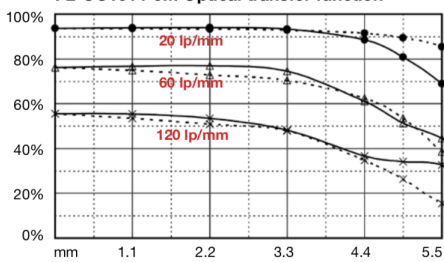
- 5M

- Format 2/3"
- f=25.0 mm
- F1.4 - 16

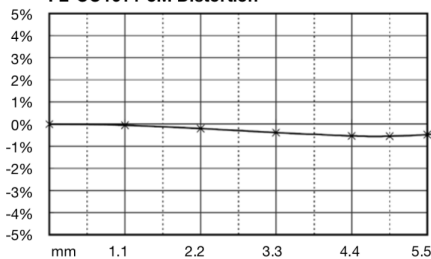
They are perfect for inspection, pattern matching, and alignment uses in which images with high definition from edge to edge definition are needed for large subjects such as wafers, chip mounters, board mounting, etc.

- Compatible with pixel size 3.45µm, 5 megapixel on 2/3" cameras
- High resolving power of 140 lp/mm from centre to corners of the image
- FL-CC1614-5M, FL-C2514-5M: 1% or less distortion, suitable for image measurement
- 40% increased light distribution
- Fast aperture F1.4
- Ideal for integration in highly developed machine vision systems
- Stable design, robust and durable
- With locking and thumb screws

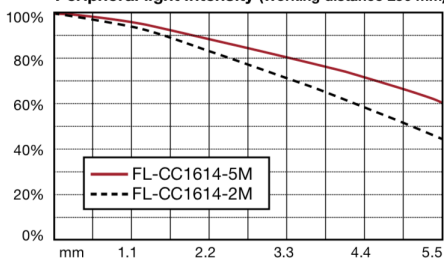
FL-CC1614-5M Optical transfer function



FL-CC1614-5M Distortion



Peripheral light intensity (Working distance 250 mm)



High resolution and high contrast

Supports 2/3" format, 5 megapixel cameras with 3.45µm pixel pitch. Achieves 140 lp/mm high resolution from center to periphery. Produces sharp, high-clarity images with high-contrast and low resolution loss all the way to the edge.

Ø 43 mm / 60 mm compact design

Consistent with the 44 mm-square cases used by many 5 megapixel cameras, we have achieved a size reduction to 43 mm for the outer diameter of FL-CC1614-5M and the FL-CC2514-5M. These lenses are an excellent choice for installation on high-performance devices.

Extremely small level of optical distortion

For both the FL-CC2514-5M and the FL-CC1614-5M, optical distortion on the diagonals is less than 1%. TV distortion is held to less than 0.2%. The resulting extremely low-distortion images are also excellent for use in the image measurement field.

Bright to the periphery

Despite the F43 mm diameter, the optics accommodate 5 megapixels with F1.4 brightness. With peripheral light intensity falloff held to an absolute minimum, it is possible to obtain bright and high-resolution images. Although they are wide-angle lenses, with the iris open we were able to raise the peripheral light level to 70% (diagonals) and thereby achieve images that are bright and clear all the way to the periphery.