

CSB4000F-10

4,190,000 pixels CMOS B/W
Digital Camera

■ Product Description

CSB4000F is a integrated type CMOS B/W Camera for machine vision use employing CMOS image sensor (Total pixel: 4,190,000).

This camera is developed to meet the function required specifically for image processing in a high order originally and have a feature making a clear distinction to previous CCD camera.

This camera employs the following features as main function.

Global Shutter: The exposure is performed on all pixels simultaneously.

WOI (Window Of Interest): Only arbitrary more than one area can be read out.

Multi Slope function: High-dynamic range is achieved.

IEEE1394 is employed to the interface to frame grabber board.

As this camera is integrated type and have a small and lightweight body (54 x 43 x 94.5 mm, approx. 220g), it is suitable for the mount to industrial machine and image processing machine.



■ Key Features

- Total pixel 4,190,000 CMOS
- WOI (Window Of Interest)
- Global Shutter
- Camera Link Interface
- C-mount
- Small and right weight body (54 x 43 x 59 mm, approx. 160g)
- Sub Sampling

CSB4000F-10

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• Image sensor	• Diagonal 17.4mm (1.1 type) CMOS Image sensor
• Total pixel	• 2048(H) x 2048(V)
• Active pixel	• 2008(H) x 2047(V)
• Pixel size	• 6.0 x 6.0 micro m
• Scanning system	• Progressive
• Sync system	• Internal
• Frame rate	• 7.14fps (Global shutter, Under all pixel's read out mode exposure 60micro sec)
• Aspect ratio	• 1:1
• Subject illumination	• Standard 3200 lx (F2.8 3100K exposure time 16msec)
• Interface	• IEEE 1394 Std.1394a-2000(Transmission:400Mbps)
• Protocol	Conforms to IIDC 1394-based Digital Camera Specification Ver1.3
• Video format	• Format 7 / Special Format (in WOI)
• Input Signal	• TRG (Shutter trigger)
• Electronic shutter	• User-defined shutter speed is selectable through IEEE1394 communication command (From 60 micro sec through 1sec)
• RTS	• Shutter speed preset or shutter speed control by pulse width
• Gamma	• 1.0
• Power supply	• Supply from IEEE1394 connector (From DC8V through DC30V)
• Power consumption	• Approx. 2.6W (in DC12V)
• Lens mount	• C-mount (The performance of CSB4000F may cause a deterioration of resolution or an image vignette depending on the lens.)
• External dimension	• 54(W) x 43(H) x 94.5(D)mm
Weight	Approx. 220g
Various Specs	CE marking (under preparation for qualifying)

■ Recommended host adaptor card

Manufacture

FA system engineering

Iris vision

Matrox

National Instruments

Technoscope

Unibrain