

Digital CCD Camera C8484-05C

For Machine Vision, Industrial Inspection and Biomedical Systems

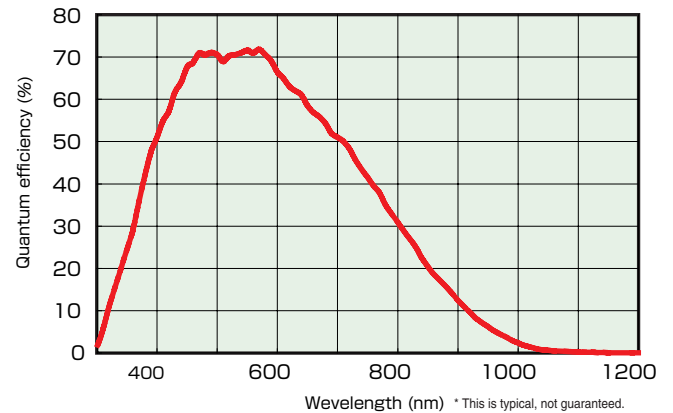


The C8484-05C is a high-resolution digital camera using a progressive scan interline CCD with no mechanical shutter. In addition to a high resolution of 1.37 million pixels, a wide dynamic range of 12 bit digital output and high sensitivity in the VIS-NIR region offers a wide application range down to low light level imaging.

FEATURES

- High resolution of 1.37 million pixels
- High sensitivity in VIS-NIR region
- Progressive scan interline CCD with no mechanical shutter
- Anti-blooming function
- Wide dynamic range
- Small readout noise of 10 electrons
- High frame rate of 68 frame / s (8×8 binning)

SPECTRAL RESPONSE



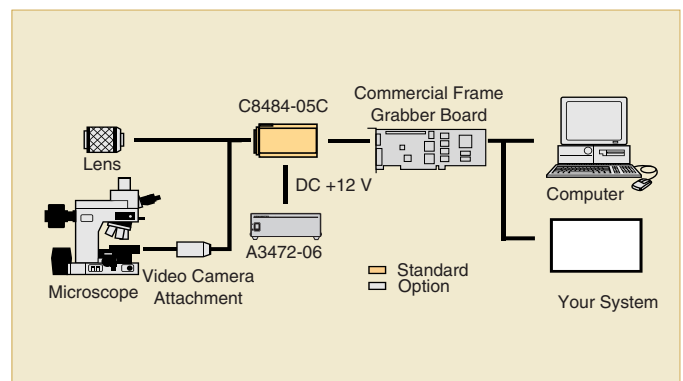
APPLICATIONS

- Machine vision
- Metallurgical microscopy
- Semiconductor inspection
- X-ray scintillator readout
- DNA chip reader
- High throughput screening reader
- Dual image acquisition (PIV) < 200 ns

SOFTWARE

- Software Development Kit : DCAM-API

SYSTEM CONFIGURATION



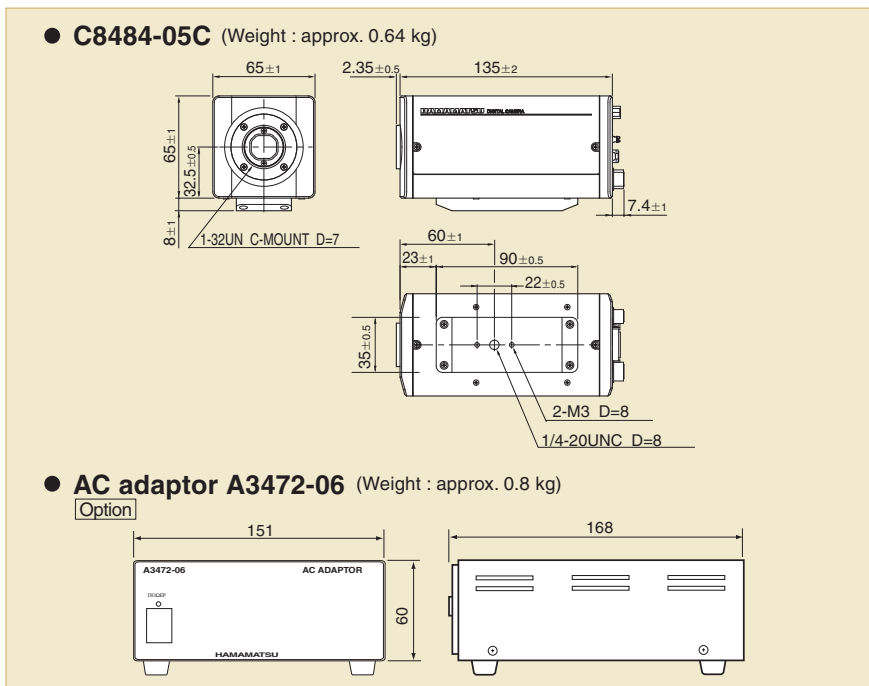
SYSTEM SPECIFICATIONS

Type number	C8484-05C	
Imaging device	Progressive scan interline CCD with micro-lens	
Effective number of pixels	1344 (H) × 1024 (V)	
Cell size	6.45 μm (H) × 6.45 μm (V)	
Effective area	8.67 mm (H) × 6.60 mm (V)	
Pixel clock rate	20 MHz/pixel	
Frame rate	binning	1 × 1
		2 × 2
		4 × 4
		8 × 8
Readout noise (r.m.s.) (typ.)	10 electrons	
Full well capacity (typ.)	17 000 electrons	
Dynamic range*	1700 : 1	
A/D converter	12 bit	
Exposure time	4.5 μs to 1 s	
Sub-array	Yes	
Analog gain	1×, 5×	
External trigger	Edge trigger, Level trigger	
Lens mount	C-mount	
Digital output	Camera Link	
External control	Camera Link	
Power requirements	DC+12 V	
Power consumption	Approx. 8 V·A	
Ambient storage temperature	-10 °C to + 50 °C	
Ambient operating temperature	0 °C to + 40 °C	
Ambient operating/storage humidity	70 % max. (with no condensation)	

*Calculated from the ratio of the full well capacity and the readout noise

DIMENSIONAL OUTLINES

(Unit : mm)



OPTIONS

- **AC adaptor** : **A3472-06**
 - Line voltage : AC 100 V to 240 V input
 - Output voltage : DC +12 V
- **Power cable** : **A3194-01**
 - Cable type : 12 pin connector cable
 - Cable length : 5 m



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