

# SPECIFICATIONS

## PRODUCT SPECIFICATIONS



**DIGITAL CCD AREA SCAN  
COLOR OR MONOCHROME  
RS-644, IEEE 1394 OR  
CAMERA LINK™ OUTPUT  
UP TO 14.8 FPS AT 1.4 MEGAPIXELS**

## BASLER A100 SERIES

### Features/Benefits

- Superior image quality improves your image processing results
- Super compact size reduces the space needed in your installation
- Choice of three output types maximizes your system design flexibility
- 100% factory testing ensures consistent product quality
- Test image generation capability reduces your integration time and aids troubleshooting
- Area of Interest (AOI) scanning allows higher frame rates
- Low smear feature improves your performance when using a pinpoint light source
- Electronic exposure time control provides maximum flexibility

### Description

The A100 Series of high-performance, digital cameras is ideal for a variety of industrial applications. The cameras can be triggered via an external sync signal or run in an internally controlled "free-run" mode. A100 cameras operate with a single voltage power supply and have simple cabling requirements. A combination of features such as binning, low smear, test images, and indicator LEDs, ensure that these versatile cameras provide an exceptional price/performance ratio.

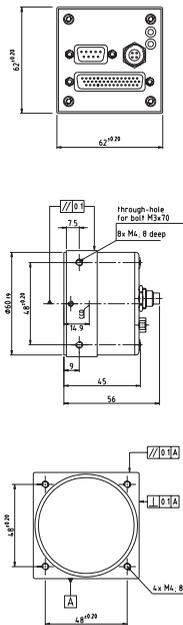
### Applications

- Semiconductor and component inspection
- Manufacturing quality control
- Traffic control
- Food and beverage inspection
- Microscopy and medical imaging
- Many other vision applications

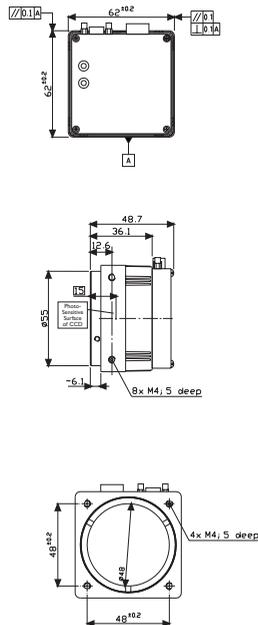
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## Dimensions (in mm)

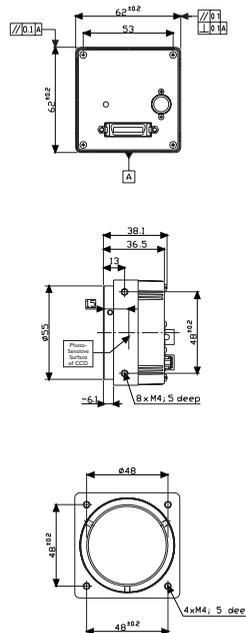
### AI01 (RS-644)



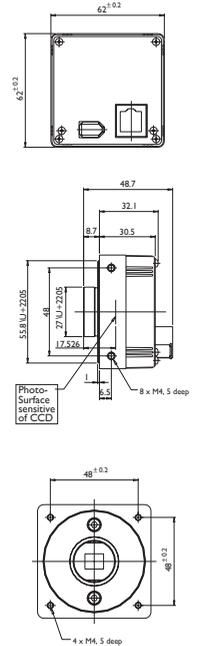
### AI01f (IEEE 1394)



### AI02k (Camera Link)



### AI02f/c (IEEE 1394)



Specifications	AI01/c	AI01f/c	AI02k	AI02f/c
Sensor Size (H x V Pixels)	1300 x 1030	1300 x 1030	1392 x 1040	1392 x 1040
Sensor Type			Progressive Scan CCD	
Pixel Size (in $\mu\text{m}$ )	6.7 x 6.7	6.7 x 6.7	6.45 x 6.45	6.45 x 6.45
Pixel Clock	18 MHz	Not Applicable	28 MHz	Not Applicable
Max. Frame Rate at Full Resolution	11.75 frames/s	12 frames/s	14.8 frames/s	15 frames/s
Color / Mono	Color or Mono	Color or Mono	Mono Only	Color or Mono
Video Output Type	RS-644 LVDS	IEEE 1394	Camera Link (Base)*	IEEE1394
Video Output Format	Single Pixel 8 bits	Mono: 8 bits/pixel Color: YUV 4:2:2 or raw data	Single Pixel 8 or 10 bits	Mono: 8 or 16 (12 bit/pixel) Color: YUV4:2:2 or raw data
Synchronization	Via external trigger or free-run	Via external trigger, via the 1394 bus or free run	Via external trigger or free-run	Via external trigger, via the 1394 bus or free run
Exposure Control	Level-controlled or programmable	Programmable via the 1394 bus	Level-controlled or programmable	Programmable via the 1394 bus
Power Requirements	24VDC ( $\pm 10\%$ ) max. 5.0 W	12VDC ( $\pm 10\%$ ) max. 5.0 W	12VDC ( $\pm 10\%$ ) max. 3.5 W	8-40 VDC, max. 4.0 W (at 12 VDC)
Lens Mounts	C-mount or F-mount	C-mount or F-mount	C-mount or F-mount	C-mount
Housing Size (L x W x H)	45 mm x 62 mm x 62 mm	48.7 mm x 62 mm x 62 mm	38.1 mm x 62 mm x 62 mm	40.8 mm x 62 mm x 62 mm
Weight	max. 380 g	max. 310 g	max. 292 g	ca. 240 g
Conformity			CE, FCC	

Specifications are subject to change without prior notice.

\*The output is RS-644 LVDS when this camera is used with an optional Basler Interface Converter (BIC)