

CS 8300 Series

Monochrome Standard-Video CCD Camera Series



- ***1/3", 1/2" or 2/3" Interlaced CCD Sensor***
- ***CCIR: 768(H) x 494(V) pixel***
EIA: 752(H) x 582(V) pixel
- ***Restart/Reset, Internal/External Sync***
- ***Random Trigger Shutter (RTS)***
- ***Frame/Field Integration***
- ***Application***
 - *Machine vision*
 - *Factory automation*
 - *Quality control*



Technical Data

Type

CS 8300 series

TV system

EIA /CCIR (suffix "C")

Image sensor

Interline CCD

CS8310B, CS8311B

ICX082AL

CS8310BC, CS8311BC

ICX083AL

CS8320Bi

ICX418ALL

CS8320BCi

ICX419ALL

CS8330Bi

ICX408AL

CS8330BCi

ICX409AL

Active pixel

EIA: 768 (H) x 494 (V) / CCIR: 752 (H) x 582 (V)

Pixel size

CS8310B, CS8311B

11.6(H) x 13.5(V) μ m

CS8310BC, CS8311BC

11.6(H) x 11.2(V) μ m

CS8320Bi

8.4(H) x 9.8(V) μ m

CS8320BCi

8.6(H) x 8.3(V) μ m

CS8330Bi

6.35(H) x 7.4(V) μ m

CS8330BCi

6.5(H) x 6.25(V) μ m

Image Area

CS8310B, CS8310BC

8.8(H) x 6.6(V) mm

CS8311B, CS8311BC

8.8(H) x 6.6(V) mm

CS8320Bi, CS8320BCi

6.5(H) x 4.85(V) mm

CS8330Bi, CS8330BCi

4.8(H) x 3.6(V) mm

Scanning lines

525 (EIA) / 625 (CCIR)

Scanning format

2:1 Interlace

Sync system

Internal/External synchronization

Aspect ratio

4:3

Illumination

Minimum: GAIN MAX, Gamma=0.45

CS8310B, CS8311B

0.5 Lux, F1.4

CS8310BC, CS8311BC

0.5 Lux, F1.4

CS8320Bi, CS8320BCi

0.2 Lux, F1.4

CS8330Bi, CS8330BCi

0.2 Lux, F1.4

Video output

VS: 1.0V(p-p)/75 Ohm terminated

Resolution

EIA
CCIR

570TV lines (H), 485 lines (TV lines)(V)

560TV lines (H), 575 lines (410TV lines)(V)

S/N

56dB(p-p)/rms (GAIN: FIX, Gamma=0)

Input Signal

External Sync signal

HD, VD/SYNC (4.0 to 2.0V(p-p)) / VS: 1.0V(p-p) SYNC 0.3V(p-p)

Electronic Shutter Spec

Normal shutter

Shutter speed in 8 steps 1/50, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000s

Random Trigger Shutter (RTS)

Shutter timing defined by external trigger signal

Restart/Reset

Available via external VD signal

Output Signals

HD / VD, Clock

White-clip

Clip-level: 820mV(p-p) (Excluding SYNC)

CCD integration mode

Field/Frame storage (integration), Switch-able by inner SW selection

Lens mount

C-Mount

Power supply

DC12V $\pm$ 10%

CS8310B/C approx. 220mA

CS8311B/C approx. 270mA

CS8320B/C approx. 230mA

CS8330B/C approx. 230mA

Ambient condition

Temperature: -10°C to 40°C, Humidity: Less than 90%

Dimension and weight

CS8310, CS8320, CS8330

29(H) x 44(W) x 78(D)mm, 130g

CS8311

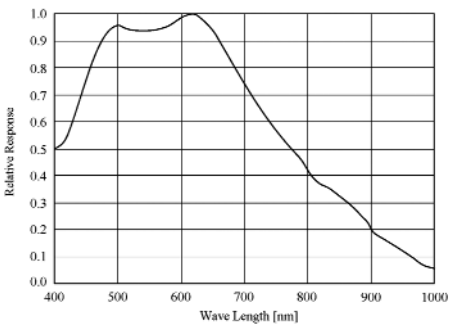
Camera head: 29(H) x 44(W) x 32.5(D)mm, 70g

Camera unit: 29(H) x 29(W) x 64(D)mm, 90g

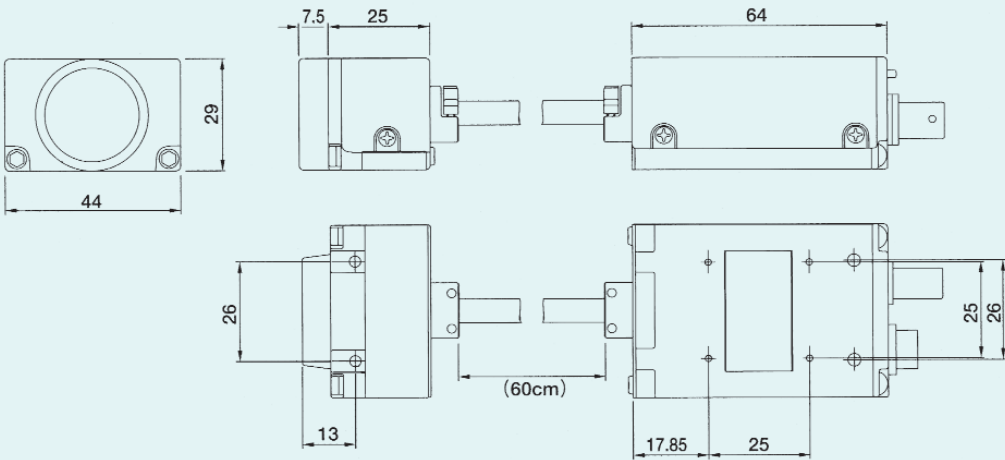
Camera cable: 600mm

Relative Spectrum Response

CS8320, CS8330



CS8311B/C



CS8310-8320-8420B/C

