

# CS 8600 Series

## Monochrome Standard-Video CCD Camera Series



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



# Technical Data

## Type

## CS 8600 series

### TV system

EIA /CCIR (suffix "C")

### Image sensor

Interline CCD

CS8620i

ICX418ALL

CS8620Ci

ICX419ALL

CS8630i

ICX408AL

CS8630Ci

ICX409AL

CS8620Hi, NIR sensitive

ICX428AL-7

CS8620HCi, NIR sensitive

ICX429AL-7

### Active pixel

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

### Pixel size

CS8620i, CS8620Hi

8.4(H) x 9.8(V)  $\mu$ m

CS8620Ci, CS8620HCi

8.6(H) x 8.3(V)  $\mu$ m

CS8630i, CS8630H

6.35(H) x 7.4(V)  $\mu$ m

CS8630Ci, CS8630HC

6.5(H) x 6.25(V)  $\mu$ m

### Image Area

CS8620i, CS8620Ci

6.5(H) x 4.85(V) mm

CS8620Hi, CS8620HCi

CS8630i, CS8630Ci

4.8(H) x 3.6(V)  $\mu$ m

CS8630H, CS8630HC

### 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

CS8620i, CS8620Ci

0.2 Lux, F1.4

CS8630i, CS8630Ci

0.2 Lux, F1.4

CS8620Hi, CS8620HCi

0.1 Lux, F1.4

CS8630H, CS8630HC

0.2 Lux, F1.4

### Sensitivity setting

AGC (Automatic Gain Control), Manual

### Gamma

1.0 / 0.45 selectable

### Video output

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

### Resolution

EIA

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

CCIR

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

### S/N

60dB(p-p)/rms (GAIN: FIX, Gamma=0)

### Input Signal

External Sync signal

HD, VD/SYNC (2 to 6V(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

### Shutter Trigger Spec

Input level

VL= 0.0 to 0.5V, VH= 2 to 5V

Input impedance

High impedance

Polarity

Positive

Pulse width

2 $\mu$ s to 1/4s

### Output Signals

HD / VD, Clock

### White-clip

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

### CCD storage mode

Field/Frame storage (integration), Switch-able by inner SW selection (initial factory setting: frame storage)

### Lens mount

C-Mount

### Power supply

DC12V +/-10% [Ripple level: Less than 10mV(p-p)]/ approx 140mA

### Ambient condition

Operation: -10°C to 50°C, Humidity: 20 to 80%

### Dimension

29(H) x 29(W) x 32(D)mm (Excluding protruding part)

### Weight

approx. 50g

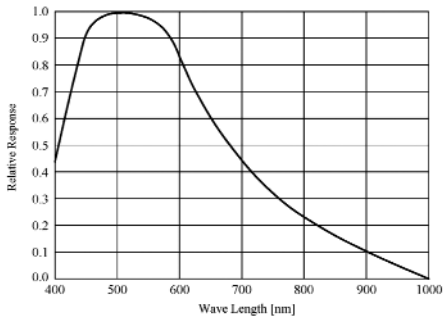
### Options

Power supply 0.8A: PS-A05C1-12MT-K, Power supply 1.3A: PS-A15D3-12MP-K

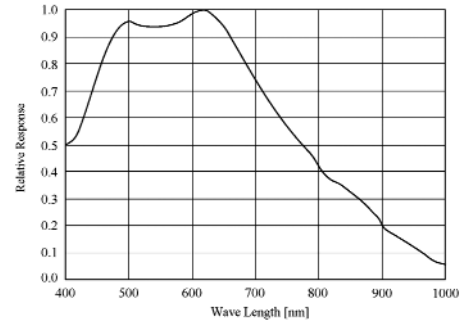
Tripod mount: CA-Base-PlateCS8600

# Relative Spectrum Response

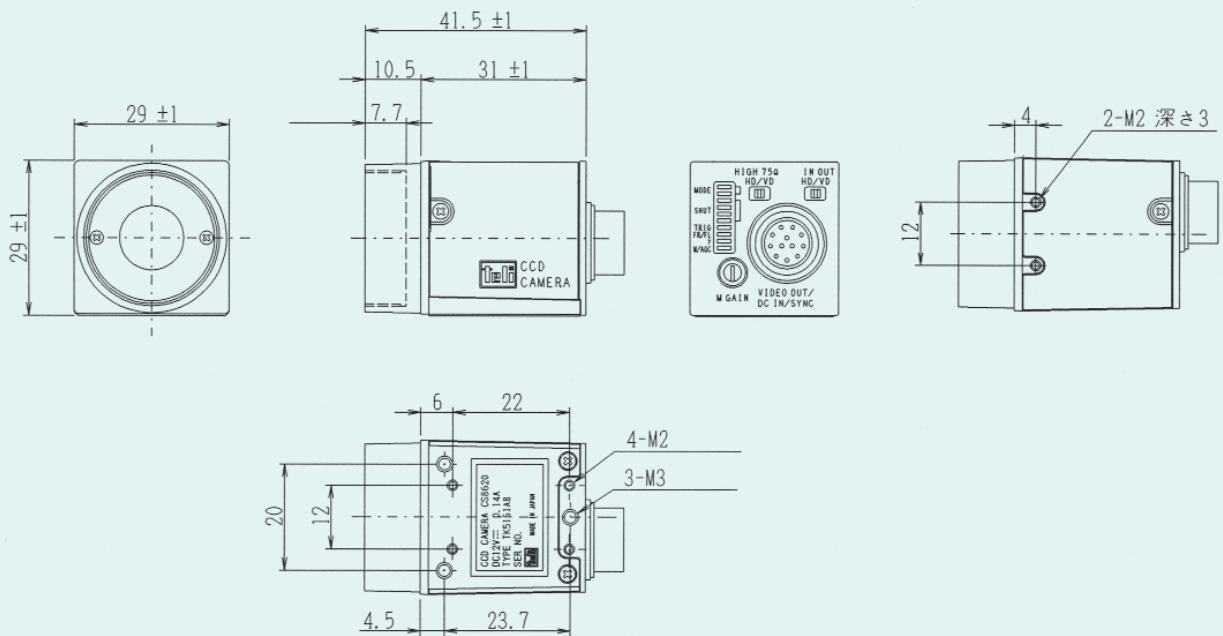
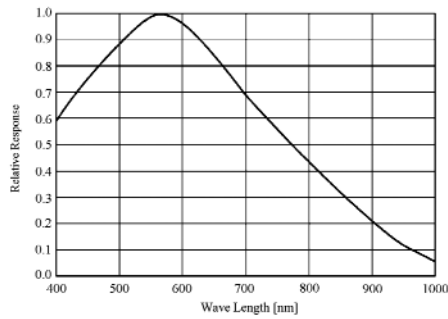
CS8620i  
CS8620Ci  
CS8630i  
CS8630Ci



CS8620Hi  
CS8620HCi



CS8630H  
CS8630HC



**SDT Dr. Seitner GmbH**  
Mühlbachstr. 20  
D-82229 Seefeld  
Tel. (49) 8152 37200  
Fax (49) 8152 79880  
org@sdt-seitner.com