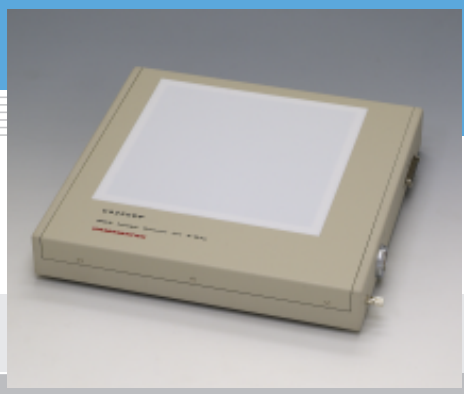


# Flat panel sensor C9250DP

High sensitivity, high-speed frame rate, high resolution



Flat panel sensor C9250DP is a digital X-ray image sensor newly developed as key devices for dental, biomedical imaging, X-ray microscopy and other real time X-ray imaging applications requiring high resolution.

## Features

- High sensitivity
- High-speed frame rate: 30 frames/s
- 624 × 624 pixels
- No image distortion
- 12-bit digital output

## Applications

- Medical
- Digital radiography
- Dental

### ■ Absolute maximum ratings (Ta=25 °C)

Parameter	Symbol	Value	Unit
Supply voltage for digital circuitry (+5 V)	D. vdd	+6.0	V
Supply voltage for analog circuitry (+5 V)	A. vdd	+6.0	V
Supply voltage for analog circuitry (±7.5 V)	V (±7.5)	±12	V
Input voltage (bin0, 1, ExtTrg, IntExt)	Vin	0 to 6.0	V
Operating temperature *1	Topr	0 to +35	°C
Storage temperature *1	Tstg	0 to +50	°C

\*1: No condensation

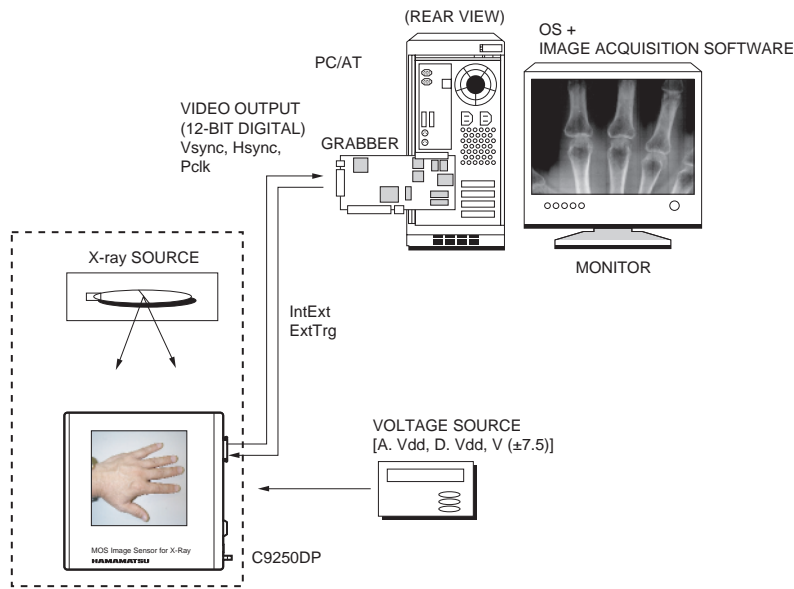
### ■ Specifications [Unless otherwise noted, Typ. Ta=25 °C, A. vdd=5.0 V, D. vdd=5.0 V, V (±7.5)=±7.5 V, single operation]

Parameter	Symbol	Value	Unit
Pixel size	-	200 × 200	μm
Active area	-	124.8 × 124.8	mm
Number of pixels	-	624 × 624	pixels
Number of active pixels	-	608 × 616	pixels
Number of array	-	389	k pixels
Frame speed	Sf (int)	30	frames/s
Frame speed external	Sf (ext)	Sf (int) to 0.1	frames/s
Resolution	Reso	2.5	line pairs/mm
Defect line *2	-	10 Max.	line
Scintillator	-	CsI	-

\*2: Without a couple of adjacent defect line that has no response.  
X-ray energy range is less than 80 kVp.

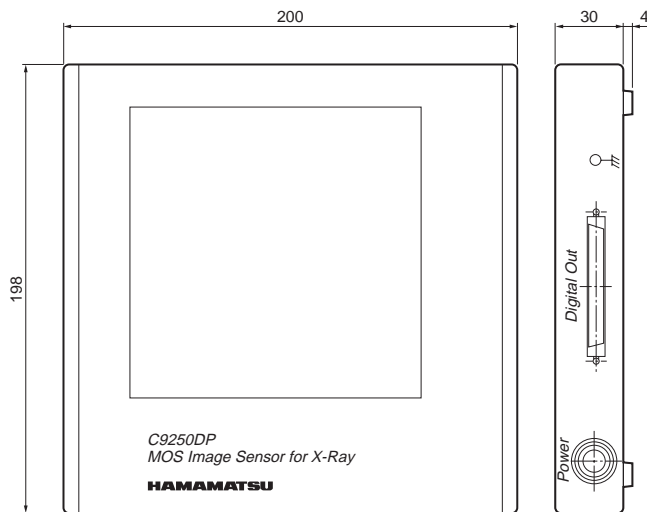
## ■ Connection

Install the digital frame grabber board into the PC by following the manufacture's instructions. When a general-purpose frame grabber board is used, trigger operation for IntExt and ExtTrg can be controlled with its digital I/O control.



KACCC0202EA

## ■ Dimensional outline (unit: mm)



Top cover is made of polycarbonate 1.0 mm thickness

KACCA0130EA

## ■ Notice

Do not subject the Flat Panel Sensor to strong vibration or shock. (Strong shock such as drop impacts may cause permanent damage to the sensor.)

Users must take responsibility for implementing X-ray shielding safety measures to avoid the risk of X-ray exposure.

# HAMAMATSU

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