

# COMPACT X-RAY CCD CAMERA XCUBE™ C11660/-01

## OVERVIEW

The new X-CUBE is a compact X-ray CCD camera using a CCD optically coupled to a high-sensitivity scintillator that was newly developed by Hamamatsu.

The X-CUBE allows capturing high-quality X-ray images with high sensitivity in the same way as handling an ordinary CCD camera.

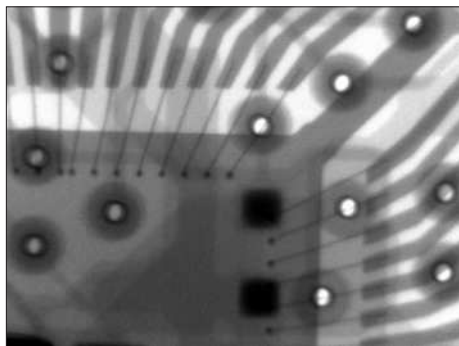


## FEATURES

- Uses High-sensitivity CsI scintillator
- High Resolution
- Compact
- Low Power Consumption

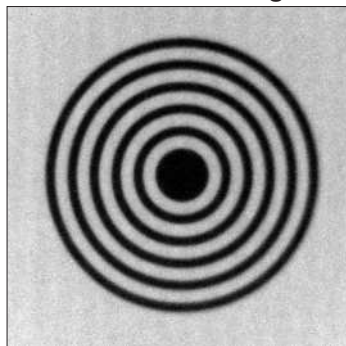
## X-RAY IMAGE EXAMPLES

- IC mounted on board



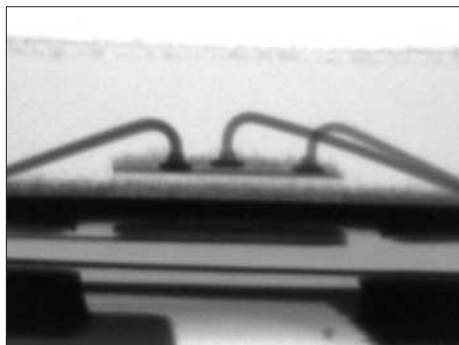
X-ray tube voltage: 100 kV  
Geometric magnification: 3.2 times

- Printed board for drilling



X-ray tube voltage: 50 kV  
Geometric magnification: 1.2 times

- LED



X-ray tube voltage: 80 kV  
Geometric magnification: 12 times

- Lithium ion battery



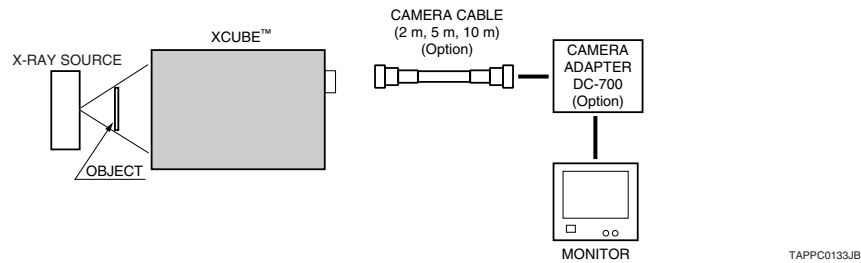
X-ray tube voltage: 100 kV  
Geometric magnification: 3 times

# SPECIFICATIONS

Parameter	C11660	C11660-01
Input Window	Carbon (CFRP)	
X-ray Sensing surface	CsI	
Energy range	Several keV to 150 keV	
Effective field of View	17 mm × 12.8 mm	
Resolution (Typ.)	12 Lp/mm	
Signal Format	EIA	CCIR
Imaging Device	Interline transfer mode 1/2" CCD	
Effective Number of Pixels (H × V)	768 × 494	752 × 582
Scanning method	525 lines, 2:1 interlace (auto switching according to input signal)	
Sync method	Internal / external (auto switching)	
External sync method	HD / VD (2 V to 5 V p-p) auto switching when rear panel switch is set to EXT	
Video Output	1.0 V p-p (negative sync, 75 Ω unbalanced)	
Power Supply Voltage (DC)	12 V (range: 9 V to 16 V)	
Power Consumption	1.6 W	
Gamma Correction	ON / OFF (selectable by rear panel switch)	
Gain	Auto gain adjustment / manual gain adjustment (selectable by rear panel switch)	
Shutter Speed	1/100 s to 1/10000 s (selectable by rear panel switch)	
External Trigger Shutter	1/4 s to 1/10000 s	1/4 s to 1/8000 s
Operating Ambient Temperature	-5 °C to +45 °C	
Storage Ambient Temperature	-10 °C to +60 °C	
Operating Ambient Humidity	Below 80 % (no condensation)	

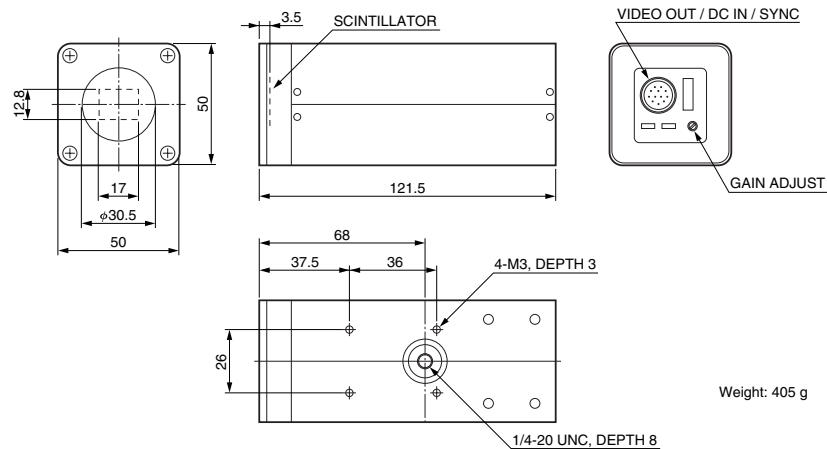
## CONNECTION EXAMPLE

### ●When using camera adapter



TAPPC0133JB

## DIMENSIONAL OUTLINES (Unit: mm)



TXPRA0007JB

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HAMAMATSU PHOTONICS K.K., Electron Tube Division

314-5, Shimokanzo, Iwata City, Shizuoka Pref., 438-0193, Japan, Telephone: (81)539/62-5248, Fax: (81)539/62-2205

U.S.A.: Hamamatsu Corporation, 360 Foothill Road, P. O. Box 6910, Bridgewater, N.J. 08807-0910, U.S.A., Telephone: (1)908-231-0960, Fax: (1)908-231-1218 E-mail: [usa@hamamatsu.com](mailto:usa@hamamatsu.com)

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