



Near Ultraviolet Sensitive 1/2" Type CCD
1.5 Megapixel Monochrome Camera

CS3930UV



Key Features

HIGH RESOLUTION performance through adoption of Megapixel CCD (1.5 million pixels) for 1392(H) x 1040(V) resolution

NEAR-UV SENSITIVITY is integrated into the CCD so that the camera can capture clear images of surface details, such as small scratches, dust and blemishes, through the use of short wavelength characteristics when inspecting semiconductors, soldering, FA precision or other applications

SQUARE-GRID PATTERN makes it easier and faster to perform computation correctly for image processing

RANDOM TRIGGER SHUTTER is built in to enable the camera to capture images at any given times (1/30s to 1/10,000s)

LVDS DIGITAL OUTPUT is available (EIA-644 single channel 10 bit)

SPECIFICATIONS

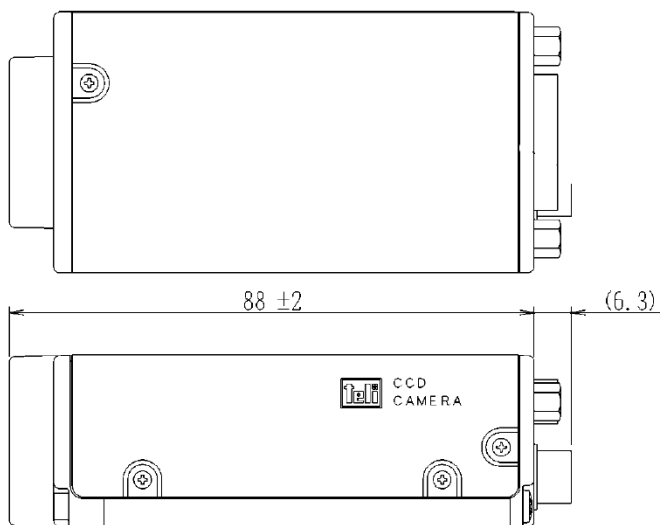
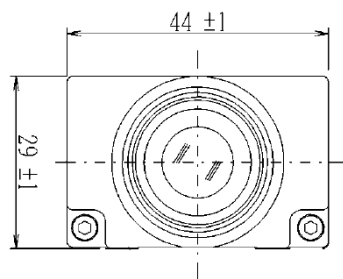
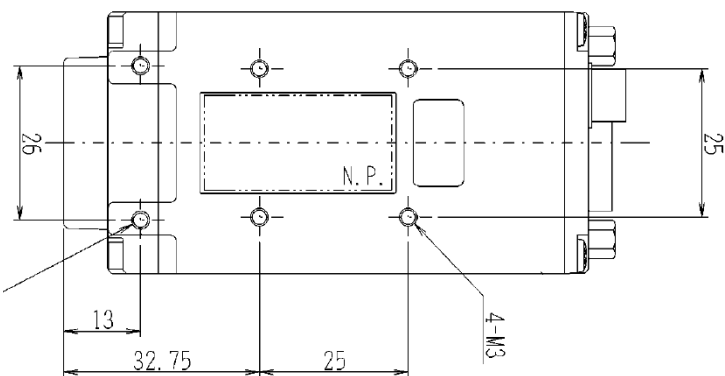
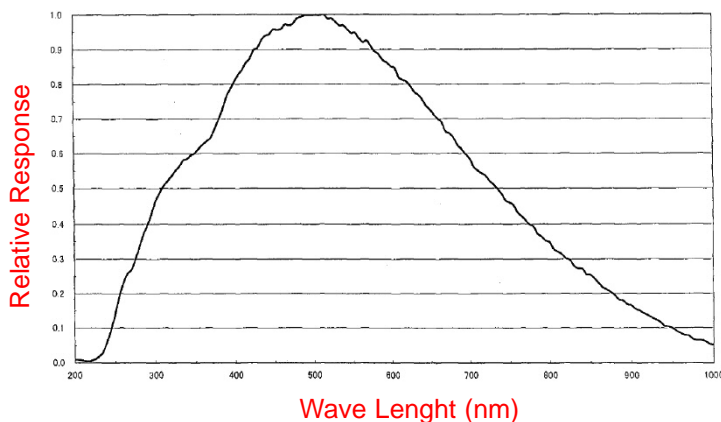
Image Sensor	1/2 Type Interline CCD
Scanning System	Progressive Scan
Total Pixels	1434(H) x 1050(V)
Active Pixels	1392(H) x 1040(V)
Pixel Size	4.65(H) x 4.65(V) micron m
Scanning Area	7.6mm(H) x 6.2mm (V)
Scanning Frequency	7.99KHz(H), 7.62Hz(V) High-Speed Draft: 29.96Hz
Aspect Ratio	4:3
Sync System	Internal
Sensitivity	Standard 1200 lx (F8)
Gamma	OFF(1.0)
Video Output	Digital Output: EIA-644 Data: 10bit (14.318MHz)
Input Signal(TRIG)	Input level 4.0±/0.5(p-p)10k-ohm Pulse Width: 1H or more
Signal Output	WEN: 4.5±/0.5V(p-p) Positive HD: EIA-644, VD: EIA-644
Electronic Shutter	FIX mode: 8 scales from 1/10,000 to 1/30s Pulse mode: Exposure-time determined by pulse width
Signal-to-Noise	50dB
Power Source	DC12V ±10%
Power Consumption	3.0W
Lens Mount	C Mount
Dimensions	44(W) x 29(H) x 88(D)mm
Weight	150g
Operatating Temperature	0 to 40 degree Celsius

Typical Applications

Sensitive to light below the visible spectrum up to 240 nm, UV-sensitive cameras are ideal for highly detailed surface inspection applications in the detection of superficial irregularities, as well as microscopy and document proofing. Near UV light does not penetrate surfaces, making the CS3930UV an excellent camera for the inspection of semiconductors.

Typical Spectral Response

(lens characteristics and light source is not reflected in table)



DATA OUT

Connector (Camera side): DX10A-28S
Cable side): DX30A-28P, DX-28-CV1

Pin Number	Signal Name
1	DATA0-H
2	DATA0-L
3	DATA1-H
4	DATA1-L
5	DATA2-H
6	DATA2-L
7	DATA3-H
8	DATA3-L
9	DATA4-H
10	DATA4-L
11	DATA5-H
12	DATA5-L
13	DATA6-H
14	DATA6-L
15	DATA7-H
16	DATA7-L
17	DATA8-H
18	DATA8-L
19	DATA9-H
20	DATA9-L
21	VD-H
22	VD -L
23	HD-H
24	HD-L
25	CLK-H
26	CLK-L
27	TRIG IN
28	GND

DC IN/SYNC

Connector (Camera side): HR10A-7R-6PB
Plug (Cable side): HR10A-7P-6S
Manufactured by HIROSE DENKI

Pin Number	Signal Name
1	VIDEO
2	VIDEO.GND
3	GND
4	TRIG
5	WEN
6	+12V



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