

VIDEOLOGY®

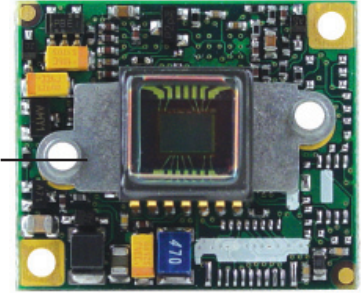
IMAGING SOLUTIONS INC.
Original Equipment Manufacturer

1/4" CCD High Resolution B&W Board Camera

20K13X/21K13X

Product Features

- Super sensitive .005 lux near IR sensitive to 1µm
- Sony 1/4" Ex-View CCD
- Ultra small mini-board 22mm x 26mm
- Software controllable features & functions
- Low noise - low blooming
- Mirror mode option
- Lens mounts: metal CS, M12 board or pinhole



Metal CCD underplate

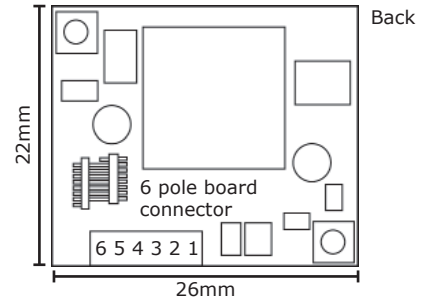
Front without lens mount

Technical Specifications

	20K13X NTSC	21K13X PAL
Electrical	1/4" IL CCD	
Image Sensor	1/4" IL CCD	
Active Pixels (HxV)	768 x 492	765 x 582
Resolution	>520 TVL	
Sensitivity	< 0.005 lux, near IR sensitive	
Signal to Noise Ratio	> 48 dB (AGC off)	
Gamma	0.45 default (1.0 via Software)	
Gain Control	Automatic 36 dB (AGC default) or Fixed options via software	
Scan Mode	Interlaced/non interlaced (selectable via software)	
Mirror Mode	Selectable via software	
Synchronization	Internal	
Back Light Compensation	Default on (selectable via software)	
Contour Enhancement	Default on	
Iris Control	CCD Iris default	
Shutter speeds	Automatic from 1/60 to 1/100,000	Automatic from 1/50 to 1/100,000
	14 fixed speeds via software	
Video Output	Composite 1Vp-p CVBS (75 ohms)	
Control communication	I ² C control	
Power supply	5VDC + 5% (not polarity protected)	
Power consumption	< 0.8W	

Mechanical

Dimensions W x H x D	26mm x 22mm x 12mm without lens (1" x 0.87" x 0.47")		
Weight w/ M-12 mount	15.4g (0.54oz)		
Lens Mounts	Replace "X" in model number with desired lens:		
Example: Change 20K13X to 20K135 to select an M-12 board mount.	2 = Metal M-12 Pinhole	5 = Metal M-12 Board	8 = Metal CS Board
Connectors	Power/Video/Communication	6-pole Board connector	
Cables supplied	6-pole mate for power and video with flying leads		



Back

Environmental

Operating Temperature	-15°C ~ 55°C (5°F ~ 131°F)
Operating Humidity	20 up to 93%RH
Storage Temperature	-25°C ~ 70°C (-13°F ~ 158°F)
Storage Humidity	Up to 98%RH
Lifetime	MTBF > 150000 hrs
Packaging	ESD safe package

I²C Communication Kit (Optional)

60K1	Software control I ² C program kit includes: I ² C board, Program cable, DB25 serial cable (or USB cable), Camera control software
60K1-U (USB version)	

Complementary Models

20K14X	Standard resolution, CVBS
20K14XCB	Blanking pulse access
20K14XYC	S-Video Y/C
20K14XDIG	YUV 8-bit digital output
20K14XUSB	USB 2.0 dual board
20K14XDN	Day/night
* 20K14XV	12VDC dual board
* 20K14XVDN	12VDC, day/night dual board
20K15X	High resolution, CVBS
20K15XYC	High resolution, S-Video Y/C
20K15XDIG	High resolution, YUV 8-bit digital output
20K15XUSB	High resolution, USB 2.0 dual board
20K15XDN	High resolution, day/night
20K15XV	High resolution, 12VDC dual board
20K13X	High resolution, B&W Sony Ex-view®, CVBS
20K13XUSB	High resolution, B&W Sony Ex-view®, USB 2.0 dual board

X = lens mount option (refer to Mechanical)

* Audio option: Equipment with audio recording capabilities is intended to be used only for legal and proper purposes. The customer assumes all liability related to legal and proper use per VIS waiver FOR-03-032.

02/14/11 PDS-20K13X Rev E

All data subject to change without notice.

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