



Color Board Cameras



20D43X NTSC
21D43X PAL

High Resolution Color Camera

Image Sensor	1/3" IL CCD
Active Pixels (HxV)	768x492 (NTSC)/ 752x582 (PAL)
Resolution	460 TVL
Sensitivity	0.5 Lux (50 IRE) F1.2
Signal To Noise Ratio	> 48 dB (AGC off)
Gain	On/ off selectable
Synchronization	Internal
Mirror Mode	On/ off selectable
Back Light Comp.	On/ off selectable

White Balance	Push to set and automatic
Shutter Speed	Automatic 1/50 - 1/100,000
Iris Control	CCD Iris default/ video iris
Video Output	1Vp-p video 75 ohms composite
Power Supply	12VDC +3 -4 (Polarity protected)
Power Consumption	1.7W
Lens Mount	M-12, CS
Dimensions (WxHxD)	42mm x 42mm x 25mm (1.65" x 1.65" x 0.98")
Interfaces	13 Pole JST



20D10X NTSC
21D10X PAL
20D20X = No Auto Iris,
32mm x 32mm

Blue Sky Series 1/3" CCD Color Board Camera

Image Sensor	1/3" IL CCD
Resolution	480 TVL
Sensitivity	<0.5 lux 30 IRE F1.2
Signal To Noise Ratio	>48 db
Gamma	0.45
Gain	Automatic
Synchronization	Internal (crystal controlled)
Audio Option	Model 20D10XA

Iris Control	Electronic/ DC auto iris (auto detect)
Video Output	1Vp-p video 75 ohms composite
<i>Video option</i>	Balanced video output @ 100 ohms (20D10XB)
Power Supply	12VDC +/- 10%
Power Consumption	<1.0W
Lens Mount	Pinhole/ M12/ CS
Dimensions (WxHxD)	38mm x 38mm x 18.14mm (1.5" x 1.5" x 0.71")
Weight	9.5g (0.021 lb)



20RD8 NTSC
21RD8 PAL

Round Color Dual Board Camera

Image Sensor	1/3" IL CCD
Active Pixels (HxV)	512 x 492 (NTSC)/ 512 X 585 (PAL)
Horizontal Resolution	> 330 (TVL)
Sensitivity	> 0.3 Lux (30 IRE) F1.2
Signal to Noise Ratio	> 46 dB (AGC off)
Gain	Automatic 26 dB
Gamma	0.45
Synchronization	Internal

Scan Mode	Interlaced
Contour Enhancement	Default on
White Balance	Automatic/ fixed modes
Video Outputs	1Vp-p 75ohms (AC coupled)
Power Supply	12VDC (+/- 10%)
Power Consumption	< 0.8W
Dimensions (WxØxD)	17.16mm x 19.25mm x 14.29mm (.676" x .758" x .562")
OLP/IR Filter	Single layer 0.81mm (depth)



20RS5 NTSC
21RS5 PAL

Round Color Board Camera

Image Sensor	1/4" IL CCD
Active Pixels (HxV)	768 x 492 (NTSC)/ 752 x 585 (PAL)
Horizontal Resolution	> 480 (TVL)
Sensitivity	0.5 lux (30 IRE) F1.2
Signal to Noise Ratio	> 46 dB (AGC off)
Gain	Automatic 26 dB
Gamma	0.45
Synchronization	Internal
Back Light Comp.	Selectable via software

Scan Mode	Interlaced
Contour Enhancement	Selectable via software
White Balance	Automatic/ fixed modes
Video Outputs	S-video Y/C/ optional CVBS
Power Supply	5VDC (+/- 10%)
Power Consumption	< 0.8W
Dimensions (WxØxD)	36.58mm x 41.66mm x .064mm
OLP/IR Filter	Single layer 0.81mm (depth)



20D47X NTSC
21D47X PAL

Computer Controllable Board Camera

Image Sensor	1/3" IL CCD
Active Pixels (HxV)	768x492 (NTSC)/ 752x582 (PAL)
Horizontal Resolution	470 TVL (CVBS)/ 490 TVL YC (S-video)
Sensitivity	<0.5 lux (50 IRE) F1.2
Signal to Noise Ratio	>48 dB (AGC off)
Gain	On/ off
Gamma	0.45, 1.0 Selectable via software
Synchronization	Internal (X-tal coupled)/ H&V lock/ line lock
Back Light Comp.	Selectable via software
Iris Control	CCD Iris default, video iris, DC Iris output via 24VACV option board
Mirror Mode	On/ off Selectable via software

Scan Mode	Interlaced/ non-interlaced
Contour Enhancement	Selectable horizontal and vertical
White Balance	Automatic/ fixed/ push lock
Shutter Speed	Electronic & fixed
Video Outputs	1Vp-p video 75 ohms composite
	S-video
	Digital YUV 8 bit
Power Supply	8- 16VDC/ 12VDC nominal
Power Consumption	<2.0W excluding: auto iris power consumption
Dimensions (WxHxD)	42mm x 42mm x 17mm (1.65" x 1.65" x 0.66")
Lens Mount	M-12, CS



B&W Board Cameras



20D30XS EIA
21D30XS CCIR

Blue Sky Series 1/3" CCD B&W Board Camera With OEM Connector

Image Sensor	1/3" IL Sony CCD, mounted on PCB
Active Pixels (HxV)	768 x 492 (PAL)/ 752 x 582 (CCIR)
Resolution	570 TVL
Sensitivity	0.05 Lux (50 IRE) f1.2
Signal To Noise Ratio	>50 dB
Gain	Automatic 32dB Manual via external DC voltage
Gamma	0.45

Synchronization	Internal (crystal controlled)
Back Light Comp.	On/ off selectable
Iris Control	Electronic
Video Output	1Vp-p baseband video 75 ohms
Power Supply	Nominal 12V/ 9-15V DC
Power Consumption	< 1.5W
Lens Mount	M-12, CS
Dimensions (WxHxD)	42mm x 42mm x 12.3mm (1.65" x 1.65" x 0.48")



20D33X EIA
21D33X CCIR

B&W Board Camera

Image Sensor	1/3" IL CCD mounted on reference plate
Active Pixels (HxV)	768x492 (EIA)/ 752x582 (CCIR)
Resolution	>570 TVL
Sensitivity	<0.05 lux (50 IRE) F1.2
Signal To Noise Ratio	> 50 dB
Gain	Automatic/ manual
Gamma	Default 0.45
Synchronization	Internal / line-lock
Back Light Comp.	On / off selectable

Shutter Speed	Automatic 1/50 - 1/100,000
Iris Control	Electronic
Video Output	1Vp-p composite video 75 ohms
Power Supply	Nominal 12V, 9-15V DC
Power Consumption	<1.5W
Lens Mount	M-12, CS
Dimensions (WxHxD)	42mm x 42mm x 12.64mm
Interfaces	Board connectors (inc. wires)



20D38X EIA
21D38X CCIR

B&W Board Camera

Image Sensor	1/3" IL CCD, Sony Ex-View®
Active Pixels (HxV)	768 x 492 (EIA)/ 752 x 582 (CCIR)
Horizontal Resolution	570 TVL
Sensitivity	.001 lux (30 IRE) F1.2
Signal to Noise Ratio	> 54 dB (AGC off)
Gain	Automatic/ manual
Gamma	0.45 or 1
Synchronization	Internal crystal coupled/ H&V lock/ Line lock
Synchronization	H Ref (Hor. Sync) V Ref. (Vert Sync)
Inputs	Pixel clock for digital video
Outputs	Asynchronous reset Single & double pulse mode

Back Light Comp.	On/ off selectable
Iris Control	CCD Iris default/ video iris @ 1Vp-p DC iris output via option board (60PB24VDL)
Scan Mode	Interlaced, non-interlaced
Contour Enhancement	Selectable horizontal/ vertical
Shutter Speed	Electronic/ fixed
Video Outputs	Composite 1Vp-p CVBS 75 ohms Digital 8 bit luminance
Power Supply	12VDC/ +3V/ -4V
Power Consumption	<1.5W
Dimensions (WxHxD)	42mm x 42mm x 13.4mm
Lens Mount	M-12, CS



20D37XS EIA
21D37XS CCIR

B&W Board Camera With H&V Lock

Image Sensor	1/3" IL Sony CCD, mounted on PCB
Active Pixels (HxV)	768 x 492 (EIA)/ 752 x 582 (CCIR)
Horizontal Resolution	>570 TVL AGC off
Sensitivity	<0.05 lux (50 IRE) F1.2
Signal to Noise Ratio	> 50 dB
Gain	Automatic (32dB)/ manual
Gamma	0.45/ selectable 1.0
Synchronization	External/ H&V
Back Light Comp.	On/ off

Scanning	Interlaced/ non-interlaced
Iris Control	Electronic
Contour Enhancement	On/ off selectable
Shutter Speed	Automatic 1/50 - 1/100,000, 8 fixed speeds
Video Outputs	1Vp-p baseband video 75 ohms
Power Supply	Nominal 12V/ 9-15V DC
Power Consumption	<1.5W
Dimensions (WxHxD)	42mm x 42mm x 12.3mm (1.65" x 1.65" x 0.48")
Lens Mount	M-12, CS



20VC3X EIA
21VC3X CCIR

B&W Board Camera

Image Sensor	1/3" IL CCD, mounted on PCB
Active Pixels (HxV)	512 x 492 (EIA)/ 512 x 582 (CCIR)
Horizontal Resolution	> 380 TVL
Sensitivity	<0.01 lux F1.2 (50 IRE)
Signal to Noise Ratio	> 48 dB
Gain	Automatic/ manual via DC voltage
Gamma	0.45
Back Light Comp.	Yes
Iris Control	Electronic

Contour Enhancement	Yes
Flickerless Mode	Yes
Synchronization	Internal
Mirror Mode	Selectable on module PCB
Video Outputs	1Vp-p (75 ohm)
Power Supply	10-12VDC (regulated recommended)
Power Consumption	<1.4W
Dimensions (WxHxD)	32mm x 32mm x 26mm
Lens Mount	M-12, CS