



# Videology®

Industrial-Grade Cameras

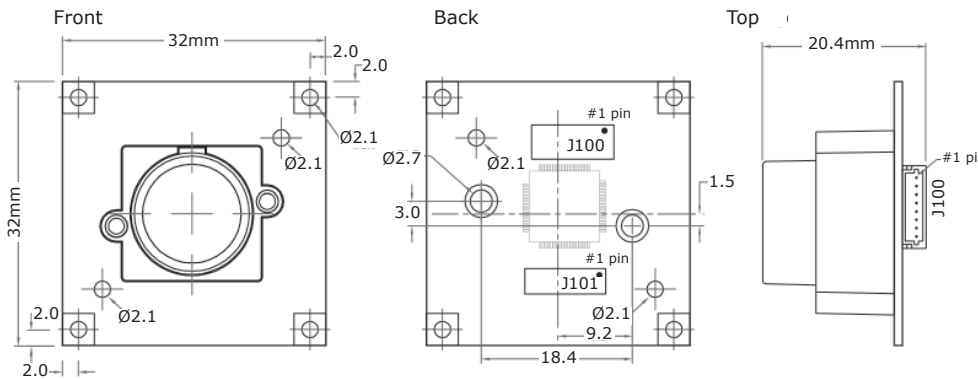
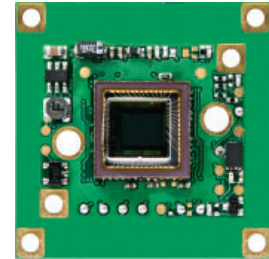
an inTEST Company

## 1/3" CMOS Color Board Camera with Wide Dynamic Range (WDR) & BT.656/ CVBS Video Output 20C31XW-A / 21C31XW-A

### Product Features

Provides analog (CBVS) and digital (BT.656) video output **simultaneously**

- Wide Dynamic range to 120dB provides brilliant color detail within both shadows and brightest light scenes
- Miniature rugged 32mm x 32mm single board
- Low 0.1 lux sensitivity
- Metal CS, M-12 and pinhole lens mounts
- Day/Night
- Digital zoom (via OSD or I<sup>2</sup>C option)



#### J100 Connector (I<sup>2</sup>C)

01 OSDC	05 DO NOT USE
02 GND	06 CVBS
03 I2C-SDA	07 GND
04 I2C-SCL	08 VIN

#### J101 Connector (Digital)

01 GND	11 YUV4	21 IRIS OUT (analog)
02 GND	12	22 GND
03 YUV0	13 YUV5	23 HSYNC
04	14	24 VSYNC
05 YUV1	15 YUV6	25
06	16	26
07 YUV2	17 YUV7	27 I2C-SDA
08	18	28 I2C-SCL
09 YUV3	19 CLOCK	29 CVBS OUT (analog)
10	20	30 POWER IN

### Technical Specifications

	20C31XW-A NTSC	21C31XW-A PAL
<b>Electrical</b>		
Image Sensor	1/3" CMOS	
Effective Pixels (H x V)	756 x 504	
Pixel Size	6.35um x 7.4um	
Shutter Mode	Rolling	
Horizontal Resolution	690 TVL	
Aspect Ratio	4:3	
Sensitivity	<0.1 Lux color / <0.01 Lux B&W	
White Balance Range	2,850K - 6,000K	
Wide Dynamic Range	120dB (max), 102dB (typical)	
Synchronization	Internal	
Iris	Manual	
Scanning System	2:1 Interlace default / progressive (optional)	
Frame Rate	30fps	25fps
White Balance Control	AWB (default)	
Day & Night	Auto (default)	
Communication	I <sup>2</sup> C / OSD (optional)	
Image Flip	Default off	
Mirror Mode	Default off	
AGC Control	Auto (default)	
Zoom	Digital	
Gamma	.45 default	
Video Output	CVBS / BT656	
Signal to Noise Ratio	47.9dB	
Supply Voltage	4.5VDC - 15VDC +/- 10%	
Power Consumption	<0.8W	

### Environmental

Operating Temperature	-30°C ~ 80°C (-22°F ~ 176°F)
Operating Humidity	30% - 90%
Storage Temperature	-30°C ~ 80°C (-22°F ~ 176°F)
Storage Humidity	<85%RH
MTBF	150,000 hours

### Mechanical

Dimensions WxHxD	32mm x 32mm x 20.4mm (1.3" x 1.3" x 0.8")		
Weight	13.6g (0.5oz)		
Lens Mounts	Replace "X" in model number with desired lens mount		
Ex: Change 20C31XW-A to 20C315W-A to select an M-12 Board Mount			
	2 = Metal M-12 Pinhole	5 = Metal M-12 Board	8 = Metal CS Mount
Lens	See our lenses at <a href="http://www.videologyinc.com/lenses">www.videologyinc.com/lenses</a>		

### Connectors

J100	70CN0061	JST-SM08B-SRSS-TB	CONN JST 8 PIN 1MM HOR SMD
J101	70CN0303	JST-30P4.0-JMCS-G-TF	CONN JST 30 PIN 4MM 0.5MM PITCH BTB SMD

### Accessories

Included	60C1041	8pin JST cable with flying leads
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### I<sup>2</sup>C Communication Kit (Optional)

60C2-U	I <sup>2</sup> C board, program cable, USB cable, camera control software (SFT-14521)	
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### OSD Kit (Optional)

60C2-O	72V0281	OSD control board
Kit Includes	60C0510	USB cable

[www.videologyinc.com](http://www.videologyinc.com)

#### HEADQUARTERS LOCATION

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#### EUROPE LOCATION

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