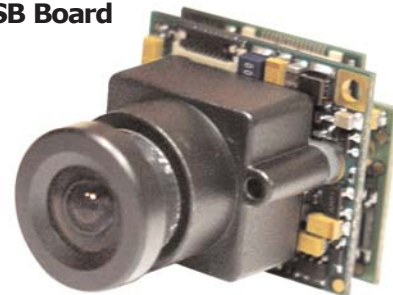


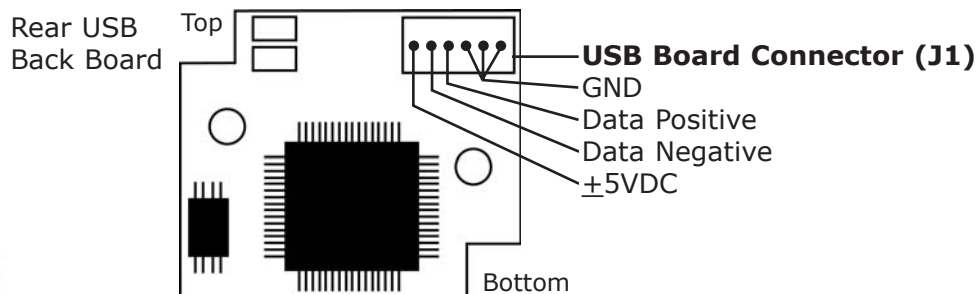


Camera Features

- All-Digital Design Uses Camera Board's Digital (D1) Output For Input To USB Board
- CCD Sensor Provides Optimal Image Quality
- USB 2.0 Bus Provides Power To Camera
- Camera Control Over USB For Color and Optional B/W Camera
- Twain and DirectX compatible software drivers



Videology's USB camera drivers are digitally signed by Microsoft® certifying the software has been tested with Windows and has not been altered since testing, enabling compatibility with your applications.



Technical Specifications

Electrical	20K15XUSB NTSC	21K15XUSB PAL
CCD Sensor	1/4" IL CCD	
Active pixels (HxV)	768 x 492	765 x 582
Horizontal resolution (TVL)	≥460	
Viewer Display (USB 2.0, 30fps) (USB 1.1, 30fps)	720 x 480 pixels max 320 x 240 pixels max	720 x 576 pixels max
Sensitivity	< 1.0 Lux	
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)	
White Balance Mode	AWB auto white mode, Fixed modes 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	
Control Communication	Camera control via USB bus	
Power supply	5VDC via USB bus	
Power consumption	< 1.3 W	

Complementary Models

20K14XUSB	Standard resolution color USB 2.0 board camera
20K14XUSB-DN	USB 2.0 Day / night color board camera
20K135USB	High resolution B&W USB 2.0 board camera

Environmental

Ambient operating temp.	-15° C to + 55° C
Ambient operating Humidity	20 up to 93%RH
Storage temp.	-25° C to + 70° C
Storage Humidity	Up to 98%RH
Lifetime	MTBF > 150000
Packaging	ESD safe package

Mechanical

Dimensions (WxHxD)	26mm x 22mm x 32mm (20K152USB pinhole mount)	
Lens mount	Metal CS:	20/21K158USB
	Metal M-12 board:	20/21K155USB
	Metal M-12 pinhole:	20/21K152USB
Connectors	Camera to USB board:	Board to board connector
	USB board connector:	(6 pin) power & data

Software

Twain and DirectX compatible software drivers
Videology's USB camera drivers are digitally signed by Microsoft® certifying the software has been tested with Windows and has not been altered since testing, enabling compatibility with your applications.

- Control of camera features thru USB ports:
- White balance
 - Gain
 - Back light compensation
 - Mirror mode
 - Shutter modes
 - Edge enhancement

Full camera DSP control available for OEMs

Data rate	480 Mb/sec. (maximum)
	Distance 5m
	W/repeater 30m

Note:

Model 20K14XUSB-DN	Day/Night optical filter (or no filter) options for maximum sensitivity in B&W mode
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