

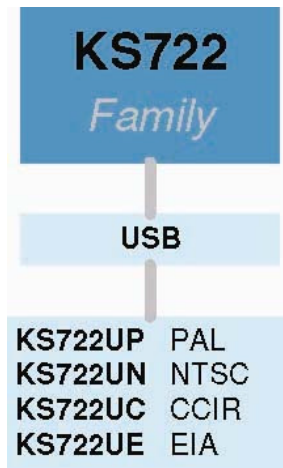
KS 722 *Family*

1/2" CCD Color / B/W USB Camera



The KS722 is a product line of 1/2" compact cameras which is available as an USB version. It is designed to be used in a wide variety of professional industrial, security and medical applications. The KS722 are available with color or monochrome sensors.

Rev. 1.03



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KS722 Features:

- 1/2" High quality Sony CCD
- Digital Signal Processor (DSP)
- 10bit ADC
- Video output CVBS Y/C
- Shutter speed up to 1/100,000sec
- White Balance One PUSH function (only color version)
- IR cut filter integrated (only color version)
- C- Mount (CS- Mount **on request**)
- Universally suitable for use with IPC, embedded systems, PC and notebook computers
- Up to 25 / 30 full screen images per second (PAL (CCIR) / NTSC (EIA))
- Available viewer-, demo application software and common driver
- Power supply via USB bus (simplifies the adherence to medical equipment guidelines)
- Digital Video signal transfer / Digital Video output
- Analog Video Output Thru 6 pin Hirose
- All camera parameters adjustable via Software (Thru USB)
- Pixel synchronativ transfer with no additional DA/AD-conversion / complete digital chain
- Optimized Signal/Noise ratio
- Windows 2000 / XP and higher, (Linux **on request**)

Optional:

- SNAP to capture an image via external foot switch
- External programmable user Functions
- Ext. Sync in (VBS)

New Function:

- Long time exposure up to 5 sec. (only USB Stream)

Applications:

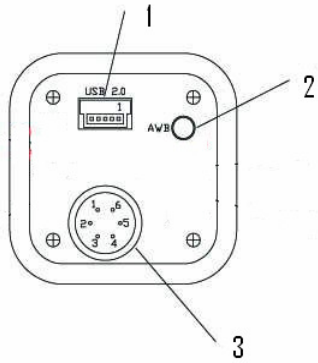
- Bottle inspection / reverse vending
- Security Technology
- Automation and quality assurance
- Medical imaging
- Visualization and microscopy
- Quality inspection
- Image processing
- Factory automation

All KS722 models:

Type	KS722UP	KS722UN
TV system	PAL	NTSC
CCD type	1/2" CCD 752 (H) x 582 (V)	1/2" CCD 768 (H) x 494 (V)
scanning system	2:1 interlaced	
Sync System	Ext. VBS auto switch (optional)	
Resolution	460 TV lines	470 TV lines
Scanning frequency (Vert.)	50Hz	60Hz
Scanning frequency (Hor.)	15,625 kHz	15,734 kHz
Aspect ratio	4:3	
Illumination (1/2" CCD)	Minimum: 0,8Lux, F1.2 (AGC ON), approx. 50% Video level	
IR Cut Filter	yes	
Analog Video output	1V p-p Composite Video (75R) / Y/C Out put thru 6 pin	
Digital Video output	USB 2.0 (YUV 4:2:2)	
Signal/noise ratio (SNR)	>56dBp-p/rms	
Electronic Shutter	Auto / Manual selectable via software Maximum shutter speed 1/100,000 sec. Long time exposure up to 5 sec.	
Manual Shutter	8 steps up to 1/10,000 ext. control	
Gamma	adjustable via Software	
Automatic Gain Control (AGC)	ON/OFF 0~18dB adjustable via software	
White balance	One Push/3000K-6000K	
Adjustment	via USB 2.0	
Power supply	DC5V +/- 10% (thru USB2.0)	
Power consumption	Max. 500 mA	
Environmental condition	Temperature: 0° to 50 °C Humidity: max. 95%	
Lens type	C- Mount (CS- Mount on request)	
External dimension	34 (W) x 34 (H) x 50 (D)mm	
Weight	approx. 110 g	
Order-No.	0104680001	0104690001

Type	KS722UC	KS722UE
TV system	CCIR	EIA
CCD type	1/2" CCD 752 (H) x 582 (V)	1/2" CCD 768 (H) x 494 (V)
scanning system	2:1 interlaced	
Sync System	Ext. VBS auto switch (optional)	
Resolution	460 TV lines	470 TV lines
Scanning frequency (Vert.)	50Hz	60Hz
Scanning frequency (Hor.)	15,625 kHz	15,734 kHz
Aspect ratio	4:3	
Illumination (1/2" CCD)	Minimum: 0,8Lux, F1.2 (AGC ON), approx. 50% Video level	
IR Cut Filter	-	
Analog Video output	1V p-p Composite Video (75R)	
Digital Video output	USB 2.0 (YUV 4:2:2)	
Signal/noise ratio (SNR)	>56dBp-p/rms	
Electronic Shutter	Auto / Manual selectable via software Maximum shutter speed 1/100,000 sec. Long time exposure up to 5 sec.	
Gamma	adjustable via Software	
Automatic Gain Control (AGC)	ON/OFF 0~18dB adjustable via software	
Adjustment	via USB 2.0	
Power supply	DC5V +/- 10% (thru USB2.0)	
Power consumption	Max. 500 mA	
Environmental condition	Temperature: 0° to 50 °C Humidity: max. 95%	
Lens type	C- Mount (CS- Mount on request)	
External dimension	34 (W) x 34 (H) x 50 (D)mm	
Weight	approx. 110 g	
Order-No.	on request	on request

Back Panel Positions:



Position	
1	USB 2.0 Digital Video Out Standard Mini B
2	White Balance (Push Function) ^{*1}
3	6 pin Hirose Connector ^{*2}

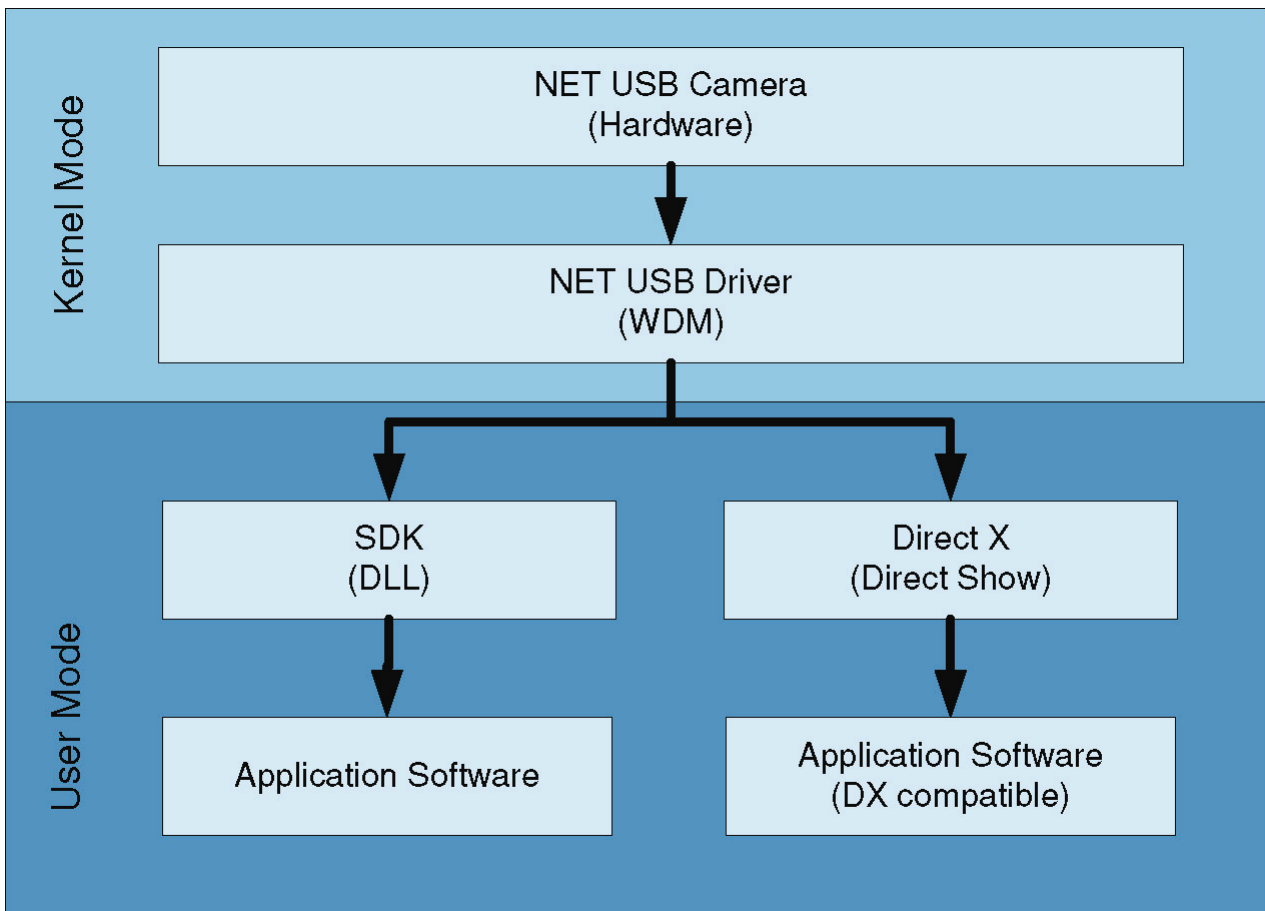
^{*1} only color version

^{*2} **Position 3** / Hirose connector:

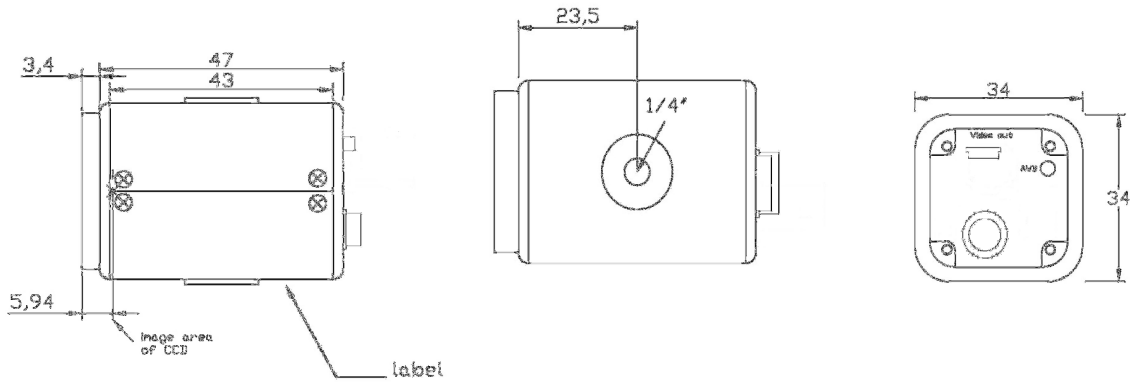
Pin	
1	GND (for Power supply, Video, ext. Sync)
2	+5V DC (500mA)
3	SNAP/ (Optional: User / On-Off)
4	Analog CVBS Out 1V p-p (75R)
5	C Output
6	Y Output

(compatible plug: HR10A-7P-6S)

Modular KS722 concept:



Dimension:



Accessories:

- Hirose connector HR10A-7P-6S (Order-no. 1500260000)
- Extension cables with Hirose connector HR10A-7P-6S (Order-no. *on request*)
- Power supply with Hirose connector HR10A-7P-6S (Order-no. *on request*)
- CS- Mount adapter- ring (Order-no. 0104890301)
- CS- / C-Mount compact lenses (Order-no. *on request*)
- 2m USB cable (Typ A – Typ Mini B) (Order-no. 0606140000)
- 3m USB cable (Typ A – Typ Mini B) (Order-no. 0606130000)
- *KS722 USB Starter Kit* (Order-no. 0500450000)

Available Software: (Software Download: www.net-gmbh.com)

- NET Adjustment Software
- USB Driver for Windows Vista / XP / 2000 (32 bit), (Linux *on request*)
- FrameGrab / USB Cam Sample Software (Demo Application SW)
- SDK (API)
- Viewer Software

System Requirements:

- PC System with 2,0 GHz, 256 MB RAM
- Windows 2000 SP4 / Windows XP SP2 / VISTA
- DirectX 9.0
- USB 2.0 interface

Design and specifications are subject to change without notice

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