

# Progressive Scan KP-33CL



## 2/3 Inch 1392 x 1040 Pixel, Digital Output KP-33CL

- 1.45 Million Pixels
- Progressive Scan with Square Pixels
- 10 bit Single Channel Digital Output
- 15 F/s normal, 60 F/s in 4 times accelerated mode
- CameraLink Output
- Multiple Step Electronic Shutter
- Frame-on-Demand Mode
- Internal or External Sync Mode
- RS-232C Remote Control

### Specifications

Imager: 2/3 inch Interline type  
Progressive Scan CCD

Pixels: 1392 x 1040

Cell Size: 6.45 x 6.45

Aspect Ratio: 4 : 3

Sensitivity: 400 lux at f4.0 3200K

S/N: 50 db

Gamma: 0.45 or 1.0 ( Analog Out )

AGC: On / Off ( Analog Out )

Shutter: 1/30 - 1/50000, eight steps

Sync: Internal / External

Trigger: Frame on Demand - 3 modes

Output: Analog 1.0 V p-p 75 ohms  
CameraLink output  
10 bit single c. 20.2 MHz

Remote: RS-232C

Power: 12 volts DC 300 ma

Size: ( W x H x D ) 44 x 44 x78 mm

Weight: 200 Grams

Lens: C-Mount

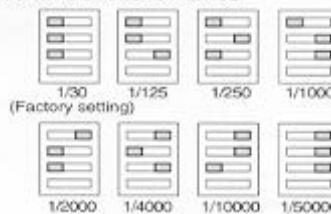
The **KP-33CL** is a monochrome high resolution progressive scan camera featuring a CameraLink output that includes 10 bit digital video, RS-232C remote control and trigger control lines. Designed for machine vision and image processing systems, the camera is capable of producing 15 frames at full vertical resolution, or 60 frames per second in the 4 times accelerated mode of operation of progressively scanned video, from the 1.45 million pixel CCD array. Square pixels make for an easy interface with vision and measurement systems. A frame on demand function allows images captured by use of an external trigger to be output immediately. An analog and a CameraLink output are provided. The CameraLink output allows direct interface with image processing systems, eliminating the A/D converter in the image processor. A multi step electronic shutter along with external H and V drive inputs, provide for ease of use in systems applications. The **KP-33CL** also features an RS-232C remote control port for control of all camera functions.

### CameraLink Output

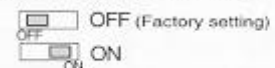
Pin No.	Signal	Pin No.	Signal
1	GND	14	GND
2	TXOUT 0 (-)	15	TXOUT 0 (+)
3	TXOUT 1 (-)	16	TXOUT 1 (+)
4	TXOUT 2 (-)	17	TXOUT 2 (+)
5	TXCLKOUT (-)	18	TXCLKOUT (+)
6	TXOUT 3 (-)	19	TXOUT 3 (+)
7	RX (+)	20	RX (-)
8	TX (-)	21	TX (+)
9	TRIG·A/VD (-) [CC1 (-)]	22	TRIG·A/VD (+) [CC1 (+)]
10	TRIG·B (+) [CC2 (+)]	23	TRIG·B (-) [CC2 (-)]
11	EXT·HD (-) [CC3 (-)]	24	EXT·HD (+) [CC3 (+)]
12	NC [CC4 (+)]	25	NC [CC4 (-)]
13	GND	26	GND

### Rear Panel Switches

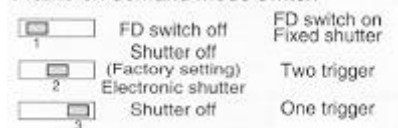
#### Electronic shutter switches



#### Frame on demand (FD) ON/OFF switch



#### Frame on demand mode switch



#### Trigger input pulse invert switch

