

KP-FB30SCL KP-FBR30SCL



Main Features

Mini CL (Mini Camera Link)

By adopting a Camera Link digital interface, higher speed video data transfer is possible. Furthermore, by adopting the small connector (SDR) of a Mini Camera Link standard, the size of the camera has been reduced.

PoCL (Power over Camera Link)

The PoCL version is connected by a single(PoCL)Mini Camera Link cable directly to a frame grabber supporting PoCL. Simple systems construction is possible.

High Resolution & High Speed

High resolution combined with high frame rates are possible with this series of cameras. Can be used for high-precision and high-speed image processing in many applications.

KP-FB30SCL / KP-FBR30SCL	0.33 Megapixel	60 fps
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Frame shutter

Higher resolution in the vertical direction is ensured for moving object.

Multi-step Shutter

A multi-step electric shutter along with a variable speed electric shutter is standard with a minimum shutter speed of 1/100,000 second.

Remote Control

Through the Camera Link interface, various setting such as shutter, mode, gain, partial scan, bit depth, etc can be adjusted.

Frame on Demand

A one trigger and fixed shutter mode of frame-on-demand are provided allowing precise timing and exposure for image capture.

Selectable bit depth

12- / 10- / 8- bit	KP-FB30SCL / KP-FBR30SCL
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Partial Scan

The start position and height of the image can be adjusted. Higher frame rates are possible by using partial scan mode.

Raw Data Output (KP-FBR30SCL)

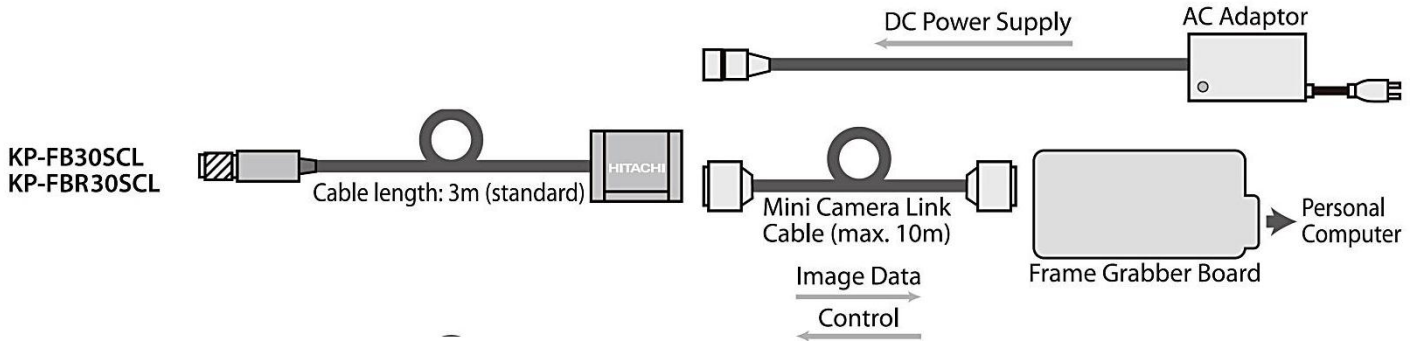
The FR series of cameras use a CCD with an RGB primary color mosaic filter, outputting the image data in a RAW format with minimal processing in order to achieve higher frame rates as compared to a normal color camera. External image processing and software is required to produce a proper color picture.

Specification

	KP-FB30SCL	KP-FBR30SCL
Imaging device	1 / 3-inch interline CCD	
Total pixels	692 (H) x 504 (V)	
Effective pixels	659 (H) x 494 (V)	
Pixel size	7.4 μm (H) x 7.4 μm (V) (square lattice)	
Color filter	—	RGB primary color mosaic filter
Sensing area	4.88 mm (H) x 3.66 mm (V)	
Scanning system	Progressive	
Aspect ratio	4 : 3	
Frame rate	60 frames per second (full pixel readout)	
Horizontal drive frequency	25.5454 MHz	
Horizontal scanning frequency	31.468 kHz	
Vertical scanning frequency	59.94 Hz	
Sync system	Internal	
Lens mount	Special mount (Flange focal distance = 8.4 mm)	Special mount
Video output	Digital output (Camera Link) Base configuration : 24.5454 MHz (Maximum cable length : 10 m) Output image size : 659 (H) x 494 (V) (full pixel readout)	
Resolution	Horizontal : 500 TV lines / Vertical : 490 TV lines	
Sensitivity	750 lx, F5.6, 3200K	2000 lx, F4, 3200K
Minimum illumination	5.9 lx (F1.4, MAX GAIN)	35 lx (F1.4, MAX GAIN)
Signal noise to ratio	50 dB	
Electric shutter	OFF, 1 / 60, 1 / 250, 1 / 1000, 1 / 2000, 1 / 4000, 1 / 10000, 1 / 50000 second OFF is normal exposure (frame rate) or changeable by variable shutter (Minimum 1 / 00000 second)	
Gamma	γ = 1	
Frame on demand		
Mode	(A) Fixed shutter mode (8 steps or variable) (B) ONE trigger mode	
Trigger input	Camera Link (CC1)	
Partial scan	Selectable start position and height of picture grabbing in 1H step.	
Power supply voltage	12 ± 1 VDC	
Current consumption	Approx. 200 mA (Approx. 2.4 W) *MAX partial scan 1H : Approx. 250 mA (Approx. 3.0 W)	
Ambient temperature		
Performance	0 to +40 °C (+32 to +104 °F) , less than 90 % RH	
Operation	10 to +50 °C (+14 to 122 °F) , less than 90 % RH	
Storage	-20 to +60 °C (-4 to 140 °F) , less than 70 % RH (without dew condensation)	
Vibration endurance	10 to 200Hz (98m / S ²) , Sweep 10 minute, 30 minutes for each 3 axis	
Shock endurance	686 m / s ² (Once for each side of top, under, left and right)	
External dimensions	Head : 12 (W) x 12.5 (H) x 47.5 (D) mm CCU : 29 (W) x 29 (H) x 38 (D) mm	
Mass	Head : Approx. 18g CCD : Approx. 50g (without cable)	

System configuration

● **Base Configuration**



Dimension

