

Progressive Scan Industrial Camera Series Featuring
PoCL (Power over CameraLink) or Mini CL (Mini CameraLink) Interface

PoCL Mini CL

Cameras for Industries



Actual Size



Black & White
KP-F500 PCL (PoCL)
KP-F500 SCL (Mini CL)
 RAW Data Output
KP-FR500 PCL (PoCL)
KP-FR500 SCL (Mini CL)
 5.05 Megapixel, 16 frame / second

Black & White
KP-F230 PCL (PoCL)
KP-F230 SCL (Mini CL)
 RAW Data Output
KP-FR230 PCL (PoCL)
KP-FR230 SCL (Mini CL)
 2.01 Megapixel, 30 frame / second

Black & White
KP-F31 PCL (PoCL)
KP-F31 SCL (Mini CL)
 RAW Data Output
KP-FR31 PCL (PoCL)
KP-FR31 SCL (Mini CL)
 0.33 Megapixel, 120 frame / second

Actual Size



Black & White
KP-F80 PCL (PoCL)
KP-F80 SCL (Mini CL)
 RAW Data Output
KP-FR80 PCL (PoCL)
KP-FR80 SCL (Mini CL)
 0.81 Megapixel, 36 frame / second

Actual Size



Black & White
KP-F200 PCL (PoCL)
KP-F200 SCL (Mini CL)
 RAW Data Output
KP-FR200 PCL (PoCL)
KP-FR200 SCL (Mini CL)
 2.01 Megapixel, 15 frame / second

Black & White Separate type
KP-FB30 PCL (PoCL)
KP-FB30 SCL (Mini CL)
 RAW Data Output Separate type
KP-FBR30 PCL (PoCL)
KP-FBR30 SCL (Mini CL)
 0.33 Megapixel, 60 frame / second

Black & White
KP-F39 PCL (PoCL)
KP-F39 SCL (Mini CL)
 RAW Data Output
KP-FR39 PCL (PoCL)
KP-FR39 SCL (Mini CL)
 0.33 Megapixel, 91 frame / second

Black & White
KP-F30 PCL (PoCL)
KP-F30 SCL (Mini CL)
 RAW Data Output
KP-FR30 PCL (PoCL)
KP-FR30 SCL (Mini CL)
 0.33 Megapixel, 60 frame / second

Actual Size



RGB Output
KP-FD500 PCL (PoCL)
KP-FD500 SCL (Mini CL)
 5.05 Megapixel, 12 frame / second
 RGB Output
KP-FD202 PCL (PoCL)
KP-FD202 SCL (Mini CL)
 2.01 Megapixel, 30 frame / second



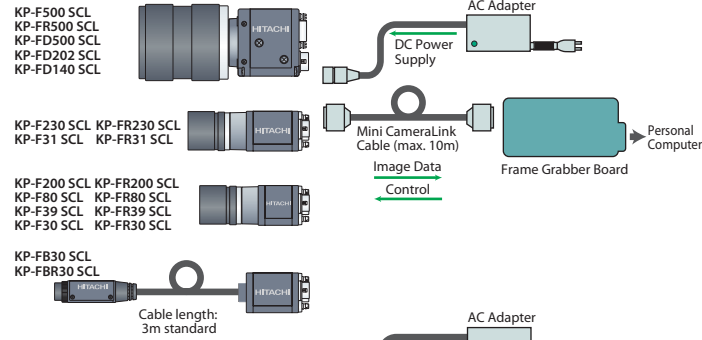
RGB Output
KP-FD140 PCL (PoCL)
KP-FD140 SCL (Mini CL)
 1.45 Megapixel, 30 frame / second

Actual Size

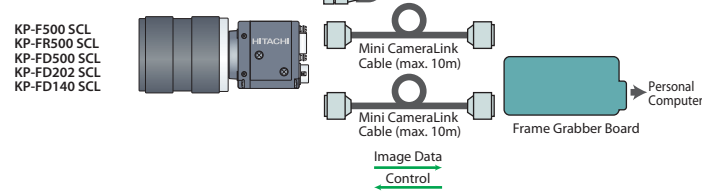
Mini CL (Mini CameraLink)

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

● Base Configuration



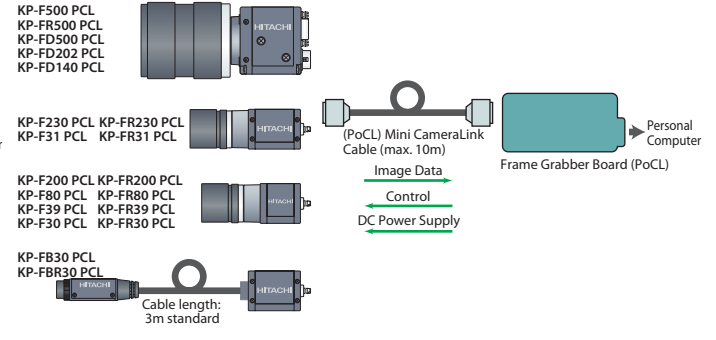
● Medium Configuration



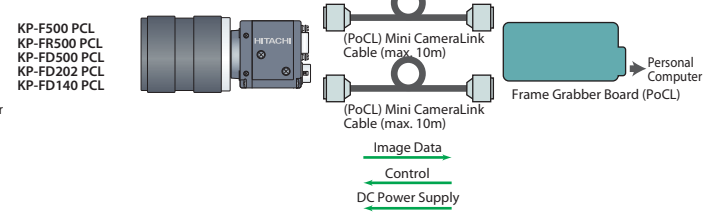
PoCL (Power over CameraLink)

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

● Base Configuration



● Medium Configuration



Specifications

		KP-F30PCL/SCL KP-FR30PCL/SCL	KP-FB30PCL/SCL KP-FBR30PCL/SCL	KP-F31PCL/SCL KP-FR31PCL/SCL	KP-F39PCL/SCL KP-FR39PCL/SCL
Imaging device	Total pixels	1/3-inch progressive scan interline CCD			
	Effective pixels	692 (H) x 504 (V)			
	Pixel size	659 (H) x 494 (V)			
	Color filter (FR type only)	7.4 μm (H) x 7.4 μm (V) (square lattice)			
Sensing area	RGB primary color mosaic filter				
Scanning system	4.88 mm (H) x 3.66 mm (V)				
Aspect ratio	Progressive				
Frame rate	4:3		120 frames per second (full pixel readout)	219 frames per second (vertical 2 pixel addition, except FR type)	91 frames per second (full pixel readout)
Horizontal drive frequency	25.5454 MHz		49.090902 MHz	36.0000 MHz	
Horizontal scanning frequency	31.468 kHz		62.937 kHz (full pixel readout)	46.875 kHz	
Vertical scanning frequency	59.94 Hz		57.618 kHz (vertical 2 pixel addition, except FR type)	91.73 Hz	
Sync system	Internal				
Lens mount	C mount	Special mount	C mount		
Flange focal distance	17.526 mm	8.4 mm	17.526 mm		
Video output	Digital output (CameraLink) Base configuration: 24.5454 MHz (Note: maximum cable length is 10 m) Output image size: 659 (H) x 494 (V) (full pixel readout)		Digital output (CameraLink) Base configuration: 24.545451 MHz x 2 TAP (Note: maximum cable length is 10 m) Output image size: 659 (H) x 494 (V) (full pixel readout)		Digital output (CameraLink) Base configuration: 36.0000 MHz (Note: maximum cable length is 10 m) Output image size: 659 (H) x 494 (V) (full pixel readout)
Resolution (except FR type)	Horizontal: 500 TV lines / Vertical: 490 TV lines				
Sensitivity	400 lx, F4, 3200 K FR type: 2000 lx, F5.6, 3200 K	750 lx, F5.6, 3200 K FR type: 2000 lx, F4, 3200 K	550 lx, F4, 3200 K FR type: 2000 lx, F4, 3200 K	400 lx, F2.8, 3200 K FR type: 2000 lx, F4, 3200 K	
Minimum illumination	1.0 lx (F1.4, MAX GAIN, without IR cut filter) FR type: 10 lx (F1.4, MAX GAIN)	5.9 lx, F1.4, MAX GAIN FR type: 35 lx (F1.4, MAX GAIN)	8.6 lx (F1.4, MAX GAIN) FR type: 35 lx (F1.4, MAX GAIN)	2.0 lx (F1.4, MAX GAIN, without IR cut filter) FR type: 20 lx (F1.4, MAX GAIN)	
Signal noise to ratio	50 dB				
Electric shutter	OFF, 1/60, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000, 1/50000 second OFF is normal exposure (frame rate) or changeable by variable shutter (minimum 1/100000 second)		OFF, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000, 1/50000 second OFF is normal exposure (frame rate) or changeable by variable shutter (minimum 1/100000 second)		OFF, 1/91, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000, 1/50000 second OFF is normal exposure (frame rate) or changeable by variable shutter (minimum 1/100000 second)
Gamma	γ = 1				
Frame on demand	Mode	(A) Fixed shutter mode (8 steps or variable) (B) ONE trigger mode (C) Reset control mode (D) VD reset mode	(A) Fixed shutter mode (8 steps or variable) (B) ONE trigger mode	(A) Fixed shutter mode (8 steps or variable) (B) ONE trigger mode	(A) Fixed shutter mode (8 steps or variable) (B) ONE trigger mode (C) Reset control mode (D) VD reset mode
	Trigger input	CameraLink (CC1) *When Reset control mode CC1 and CC2 are used			
Partial scan	Selectable start position and height of picture grabbing in 1H step.				
Power supply voltage	12 ± 1 VDC				
Current consumption	Approx. 120 mA (approx. 1.5 W)	Approx. 200 mA (approx. 2.4 W) *MAX partial scan 1H: Approx. 250 mA (approx. 3.0 W)	Approx. 190 mA (approx. 2.3 W) *MAX partial scan 1H: Approx. 230 mA (approx. 2.8 W)	Approx. 150 mA (approx. 1.8 W)	
Ambient temperature	Performance	0 to +40 °C (+32 to +104 °F), less than 90 % RH (without dew condensation)			
	Operation	10 to +50 °C (+14 to 122 °F), less than 90 % RH (without dew condensation)			
	Storage	-20 to +60 °C (-4 to 140 °F), less than 70 % RH (without dew condensation)			
Vibration endurance	98 m/s ² (Acceleration: constant) 10 to 200 Hz, sweep: 10 minutes, XYZ 30 minutes				
Shock endurance	686 m/s ² (Drop test, once each top, bottom, left and right)				
External dimensions	29 (W) x 29 (W) x 29 (D) mm (Not including protrusions)	Head: 12 (W) x 12.5 (H) x 47.5 (D) mm CCU: 29 (W) x 29 (H) x 38 (D) mm	29 (W) x 29 (W) x 38 (D) mm (Not including protrusions)	29 (W) x 29 (W) x 29 (D) mm (Not including protrusions)	
Mass	Approx. 50 g	Head: Approx. 18 g CCU: Approx. 50 g (without cable)	Approx. 50 g		

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.

Camera Lineup:

Black & White Cameras

KP-F500 PCL/SCL	5.05 Megapixel	16 frame/second
KP-F230 PCL/SCL	2.01 Megapixel	30 frame/second
KP-F200 PCL/SCL	2.01 Megapixel	15 frame/second
KP-F80 PCL/SCL	0.81 Megapixel	36 frame/second
KP-F31 PCL/SCL	0.33 Megapixel	120 frame/second
KP-F39 PCL/SCL	0.33 Megapixel	91 frame/second
KP-F30 PCL/SCL	0.33 Megapixel	60 frame/second
KP-FB30 PCL/SCL	0.33 Megapixel	60 frame/second

RAW Data Output Cameras

KP-FR500 PCL/SCL	5.05 Megapixel	16 frame/second
KP-FR230 PCL/SCL	2.01 Megapixel	30 frame/second
KP-FR200 PCL/SCL	2.01 Megapixel	15 frame/second
KP-FR80 PCL/SCL	0.81 Megapixel	36 frame/second
KP-FR31 PCL/SCL	0.33 Megapixel	120 frame/second
KP-FR39 PCL/SCL	0.33 Megapixel	91 frame/second
KP-FR30 PCL/SCL	0.33 Megapixel	60 frame/second
KP-FBR30 PCL/SCL	0.33 Megapixel	60 frame/second

RGB Output Cameras

KP-FD500 PCL/SCL	5.05 Megapixel	12 frame/second
KP-FD202 PCL/SCL	2.01 Megapixel	30 frame/second
KP-FD140 PCL/SCL	1.45 Megapixel	30 frame/second

RAW Data Output

(KP-FR500PCL/SCL, KP-FR230PCL/SCL, KP-FR200PCL/SCL, KP-FR80PCL/SCL, KP-FR39PCL/SCL, KP-FR31PCL/SCL, KP-FR30PCL/SCL, KP-FBR30PCL/SCL)

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.

Frame Shutter

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

Multi-step Shutter

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

Frame on Demand

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

Remote Control

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

Partial Scan

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

	KP-F80PCL/SCL KP-FR80PCL/SCL	KP-F200PCL/SCL KP-FR200PCL/SCL	KP-F230PCL/SCL KP-FR230PCL/SCL	KP-F500PCL/SCL KP-FR500PCL/SCL
		1/1.8-inch progressive scan interline CCD		2/3-inch progressive scan interline CCD
	1077 (H) x 788 (V)	1688 (H) x 1248 (V)		2536 (H) x 2068 (V)
	1034 (H) x 779 (V)	1628 (H) x 1236 (V)		2456 (H) x 2058 (V)
	4.65 μm (H) x 4.65 μm (V) (square lattice)	4.4 μm (H) x 4.4 μm (V) (square lattice)		3.45 μm (H) x 3.45 μm (V) (square lattice)
	4.76 mm (H) x 3.57 mm (V)	7.16 mm (H) x 5.44 mm (V)		8.47 mm (H) x 7.10 mm (V)
				5:4
	36 frames per second (full pixel readout)	15 frames per second (full pixel readout)	30 frames per second (full pixel readout) 54 frames per second (vertical 2 pixel addition, except FR type)	16 frames per second (full pixel readout)
			72.0000 MHz	64.0000 MHz
	28.346 kHz	18.75 kHz	37.5 kHz (full pixel readout) 33.898 kHz (vertical 2 pixel addition, except FR type)	33.264 kHz
	35.79 Hz	14.97 Hz	29.95 Hz (full pixel readout) 54.06 Hz (vertical 2 pixel addition, except FR type)	16.00 Hz (full pixel readout) 31.98 Hz (vertical 2 pixel addition mode, except FR type)
	Digital output (CameraLink) Base configuration: 36.0000 MHz (Note: maximum cable length is 10 m) Output image size: 1024 (H) x 768 (V) (full pixel readout)	Digital output CameraLink Clk = 36.0000 MHz (Note: maximum cable length is 10 m) Output image size: 1628 (H) x 1236 (V) (full pixel readout)	Digital output (CameraLink) Base configuration: 36.0000 MHz x 2 TAP (Note: maximum cable length is 10 m) Output image size: 1628 (H) x 1236 (V) (full pixel readout)	Digital output (CameraLink) Base configuration : 64.0000 MHz x 2TAP Medium configuration : 32.0000 MHz x 4TAP Maximum cable length: 10m Output image size: 2456(H) x 2058(V) (full pixel readout)
	Horizontal / Vertical: Approx. 800 TV lines	Horizontal / Vertical: 1200 TV lines		Horizontal/Vertical: 2000TV lines
	400 lx, F2.8, 3200 K FR type: 2000 lx, F4, 3200 K	400 lx, F4, 3200 K FR type: 2000 lx, F8, 3200 K	500 lx, F5.6, 3200 K FR type: 2000 lx, F5.6, 3200 K	400 lx, F5.6, 3200 K FR type: 2000lx, F8, 3200K
	1.0 lx (F1.4, MAX GAIN, without IR cut filter) FR type: 20 lx (F1.4, MAX GAIN)	1.0 lx (F1.4, MAX GAIN, without IR cut filter) FR type: 5.0 lx (F1.4, MAX GAIN)	3.9 lx (F1.4, MAX GAIN) FR type: 20 lx (F1.4, MAX GAIN)	1.0 lx (F1.4, MAX GAIN, without IR cut filter) FR type: 15 lx (F1.4 GAIN MAX)
	OFF, 1/36, 1/60, 1/125, 1/250, 1/1000, 1/2000, 1/10000, 1/50000 second OFF is normal exposure (frame rate) or changeable by variable shutter (minimum 1/100000 second)	OFF, 1/15, 1/60, 1/125, 1/250, 1/1000, 1/2000, 1/10000, 1/50000 second OFF is normal exposure (frame rate) or changeable by variable shutter (minimum 1/100000 second)	OFF, 1/30, 1/60, 1/125, 1/250, 1/1000, 1/2000, 1/10000, 1/50000 second OFF is normal exposure (frame rate) or changeable by variable shutter (minimum 1/100000 second)	OFF 1/16, 1/60, 1/100, 1/250, 1/1000, 1/2000, 1/10000, 1/50000 second. OFF is normal exposure (frame rate) or changeable by variable shutter (Minimum 1/100000 second)
	(A) Fixed shutter mode (8 steps or variable) (B) ONE trigger mode (C) Reset control mode (D) VD reset mode	(A) Fixed shutter mode (8 steps or variable) (B) ONE trigger mode (C) VD reset mode	(A) Fixed shutter mode (8 steps or variable) (B) ONE trigger mode	(A) Fixed shutter (8 steps or variable) (B) ONE trigger mode (C) VD reset mode
				CameraLink (CCI) or DC IN/SYNC connector
	Selectable start position and height of picture grabbing in 1H step			
	Approx. 120 mA (approx. 1.5 W)	Approx. 170 mA (approx. 2.1 W)	Approx. 270 mA (approx. 3.2 W) *MAX partial scan 1H: Approx. 360 mA (approx. 4.3 W)	Approx. 310 mA (Approx. 3.7 W) *MAX partial scan 1H: Approx.390 mA (Approx. 4.7 W)
				10 to 55 Hz (2.37 to 71.7 m/s ²), sweep: 1 min XYZ 30min
				490.3 m/s ² (Drop test, once each top, bottom, left and right)
		29 (W) x 29 (W) x 38 (D) mm (Not including protrusions)		44 (W) x 44 (H) x 41 (D) mm (Not including mount protrusions)
				Approx. 110 g

Selectable bit depth

Selectable bit depth of:

12-/10-/8-bit	KP-F500 PCL/SCL, KP-FR500 PCL/SCL
10-/8-bit	KP-F230 PCL/SCL, KP-FR230 PCL/SCL, KP-F200 PCL/ SCL, KP-FR200 PCL/ SCL, KP-F80 PCL/SCL, KP-FR80 PCL/SCL, KP-F31 PCL/SCL, KP-FR31 PCL/SCL, KP-F39 PCL/SCL, KP-FR39 PCL/SCL, KP-F30 PCL/SCL, KP-FR30 PCL/SCL, KP-FB30 PCL/SCL, KP-FBR30 PCL/SCL,
36-/30-/24-bit	KP-FD500 PCL/SCL, KP-FD202 PCL/SCL, KP-FD140 PCL/SCL

High Color Fidelity

(KP-FD500 PCL/SCL, KP-FD202 PCL/SCL, KP-FD140 PCL/SCL)

RGB primary color mosaic filter and 14-bit accelerated DSP achieve a high color fidelity.

Selectable White Balance Adjustment

(KP-FD500 PCL/SCL, KP-FD202 PCL/SCL, KP-FD140 PCL/SCL)

Selectable white balance adjustment method of ATW (auto-tracking), Manual (manual setting of R and B gain) or One-push (one-push auto adjustment)

6-Vector Independent Masking

(KP-FD500 PCL/SCL, KP-FD202 PCL/SCL, KP-FD140 PCL/SCL)

A 6-Vector color corrector can be selected, allowing independent adjustment of the hue and saturation of the primary R,G,B, and complementary Cy, Mg, and Ye vectors, for accurate color reproduction of difficult objects.



KP-F500 PCL/ SCL
KP-FR500 PCL/ SCL
KP-FD500 PCL/SCL
KP-FD202 PCL/ SCL
KP-FD140 PCL/ SCL



KP-F230 PCL/ SCL
KP-FR230 PCL/ SCL
KP-F31 PCL/ SCL
KP-FR31 PCL/ SCL



KP-F200 PCL/ SCL
KP-FR200 PCL/ SCL
KP-F80 PCL/ SCL
KP-FR80 PCL/ SCL
KP-F39 PCL/ SCL
KP-FR39 PCL/ SCL
KP-F30 PCL/ SCL
KP-FR30 PCL/ SCL



KP-FB30 PCL/ SCL
KP-FBR30 PCL/ SCL

Specifications

		KP-FD140PCL/SCL	KP-FD202PCL/SCL	KP-FD500PCL/SCL
Imaging device		1/2-inch progressive scan interline CCD	1/1.8-inch progressive scan interline CCD	2/3-inch progressive scan interline CCD
	Total pixels	1434 (H) x 1050 (V)	1688(H) x 1248(V)	2536(H) x 2068(V)
	Effective pixels	1392 (H) x 1040 (V)	1628(H) x 1236(V)	2456(H) x 2058(V)
	Pixel size	4.65 μm (H) x 4.65 μm (V) (square lattice)	4.4 μm (H) x 4.4 μm (V) (square lattice)	3.45 μm (H) x 3.45 μm (V) (square lattice)
	Color filter	RGB primary color mosaic filter		
Sensing area		6.32 mm (H) x 4.76 mm (V)	7.13 mm (H) x 5.37 mm (V)	8.45 mm (H) x 7.07 mm (V)
Scanning system		Progressive		
Aspect ratio		4 : 3		5 : 4
Frame rate		30 frames per second (full pixel readout)		12 frames per second (full pixel readout)
Horizontal drive frequency		57.6000 MHz	72.0000 MHz	48.0000 MHz
Horizontal scanning frequency		32.179 kHz	37.5 kHz	24.922 kHz
Vertical scanning frequency		30.13 Hz	29.95 Hz	11.99 Hz
Sync system		Internal		
Lens mount		C mount		
Flange focal distance		17.526 mm		
Video output	Interface	CameraLink 57.6000 MHz	CameraLink 72.0000 MHz	CameraLink 64.0000 MHz
	Protocol	Base configuration (1ch: SDR connector x 1pc.) Medium configuration (2ch: SDR connector x 2pcs)		
	Output format	(a) 24bits (R: 8bit G: 8bit B: 8bit) (Base configuration) (b) 30bits (R: 10bit G: 10bit B: 10bit) (Medium configuration) (c) 36bits (R: 12bit G: 12bit B: 12bit) (Medium configuration)		
	Output image size	1360(H) x 1024(V) (full pixel readout)	1620(H) x 1220(V) (full pixel readout)	2448 (H) x 2050 (V) (full pixel readout)
Sensitivity		2000 lx, F5.6, 3200 K		2000 lx, F1.1, 3200 K
Minimum illumination		10 lx (F1.4, MAX GAIN)		5 lx (F1.4, MAX GAIN)
Signal noise to ratio		48 dB		
Electric shutter		OFF, 1/30, 1/60, 1/100, 1/250, 1/1000, 1/2000, 1/10000, 1/50000 second. OFF is normal exposure (frame rate) or changeable by variable shutter (from 10 to 1/100000 second)		OFF, 1/12, 1/60, 1/100, 1/250, 1/1000, 1/2000, 1/10000, 1/50000 second OFF is normal exposure (frame rate) or changeable by variable shutter (from 10 to 1/100000 second)
Frame on demand	Mode	(A) Fixed shutter mode (8 steps or variable) (B) ONE trigger mode (C) VD reset mode		
	Trigger input	CameraLink (CC1) or DC IN/SYNC connector		
Partial scan		Selectable start position and height of picture grabbing in 1H step.		
ALC (Auto level control)	Mode	(A) AGC (Auto gain control) (B) AES (Auto electric shutter) (C) AGC & AES		
	Video level	Adjustable		
Gain		Auto/Manual (0 to +18 dB) (Approx. 0.0358 dB step)		Auto/Manual (0 to +12 dB) (Approx. 0.0358 dB step)
White balance		ATW / MANUAL / One-push		
Gamma		OFF (γ=1) / LUT		
Color masking		OFF / ON (6 vector independent masking)		
Paint black		Adjustable		
Sharpness		Adjustable		
Brightness		Adjustable		
Knee		Adjustable		
Power supply voltage		12 ± 1 VDC		
Current consumption		Approx. 300 mA (Approx. 3.6 W)	Approx. 340 mA (Approx. 4.1 W) *When partial scan is ON, Approx. 415 mA (Approx. 5.0 W)	Approx. 310 mA (Approx. 3.7 W)
Ambient temperature	Performance	0 to +40 °C (+32 to +104 °F), less than 90 % RH (without dew condensation)		
	Operation	-10 to +50 °C (+14 to +122 °F), less than 90 % RH (without dew condensation)		
	Storage	-20 to +60 °C (-4 to +140 °F), less than 70 % RH (without dew condensation)		
Vibration endurance		10 to 55 Hz (2.37 to 71.7 m/s ²), sweep: 1 minute, XYZ, 30 min		
Shock endurance		490.3 m/s ² (Drop test, once each top, bottom, left and right)		
External dimensions		44 (W) x 44 (H) x 41 (D) mm (not including mount protrusions)		
Mass		Approx. 110 g	Approx. 110 g	Approx. 110 g

Optional Accessory List

Type		PCL Type							SCL Type																													
Model Name		KP-F500PCL	KP-FR500PCL	KP-FD500PCL	KP-FD140PCL	KP-F230PCL	KP-FR230PCL	KP-F31PCL	KP-FR31PCL	KP-F200PCL	KP-FR200PCL	KP-F80PCL	KP-FR80PCL	KP-F39PCL	KP-FR39PCL	KP-F30PCL	KP-FR30PCL	KP-FB30PCL	KP-FBR30PCL	KP-F500SCL	KP-FR500SCL	KP-FD500SCL	KP-FD140SCL	KP-F230SCL	KP-FR230SCL	KP-F31SCL	KP-FR31SCL	KP-F200SCL	KP-FR200SCL	KP-F80SCL	KP-FR80SCL	KP-F39SCL	KP-FR39SCL	KP-F30SCL	KP-FR30SCL	KP-FB30SCL	KP-FBR30SCL	
Junction Box	JU-M1A																									○			○							○		
	JU-F1																									○			○							○		
	JU-F30			(*1)																	○						○											
Tripod Adaptor	TA-F500	○																			○																	
	TA-F230						○																			○												
	TA-F200S											○																						○				
	TA-FB30/FB30P																		○																		○	
Mini CameraLink Cable SDR-MDR (for High Frequency)	(1m) C-101SCL																				○				○				○							○		
	(2m) C-201SCL																					○				○				○						○		
	(3m) C-301SCL																					○				○				○						○		
	(5m) C-501SCL																					○				○				○						○		
	(10m) C-102SCL																																				○	
	(10m) C-102SCL (HF)																										○			○						○		
PoCL Cable SDR-SDR	(1m) C-101PCL (SS)	○				○				○																												
	(2m) C-201PCL (SS)	○				○				○																												
	(3m) C-301PCL (SS)	○				○				○																												
	(5m) C-501PCL (SS)	○				○				○																												
	(10m) C-102PCL (SS)																																					
PoCL Cable SDR-MDR	(1m) C-101PCL (SM)	○				○				○																												
	(2m) C-201PCL (SM)	○				○				○																												
	(3m) C-301PCL (SM)	○				○				○																												
	(5m) C-501PCL (SM)	○				○				○																												
	(10m) C-102PCL (SM)																																					
Camera Cable	(2m) C-201KSM	○																							○			○									○	
	(5m) C-501KSM	○																							○			○									○	
	(10m) C-102KSM	○																							○			○									○	
12 Pin Plug	HR10A-10P-12S	○																																			○	
Dummy Glass	ARC1214	○																																			○	
IR Cut Filter	IRC650	(*4)																																			○	

(*1) : JU -F30 can be used only to input or output Trigger signal etc. Power cannot be supplied.

(*2) : Available for only KP-FD140SCL.

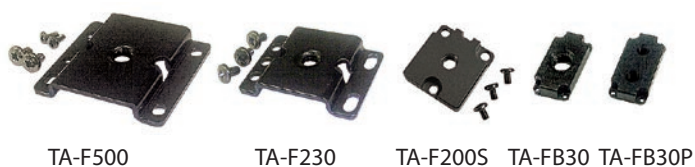
(*3) : Available for only KP-FD140PCL.

(*4) : IRC650 is equipped in the camera.

(*5) : ARC1214 is equipped in the F-type camera.

IRC650 is equipped in the FR-type camera.

Tripod Adaptor



TA-F500

TA-F230

TA-F200S

TA-FB30

TA-FB30P

CameraLink Cable



SDR-MDR

SDR-SDR

Rear View



KP-F500 PCL/SCL
 KP-FR500 PCL/SCL
 KP-FD500 PCL/SCL
 KP-FD202 PCL/SCL
 KP-FD140 PCL/SCL

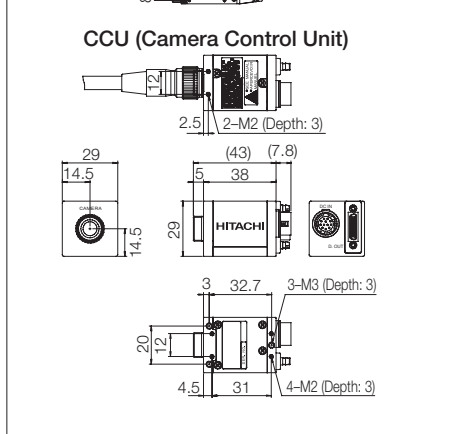
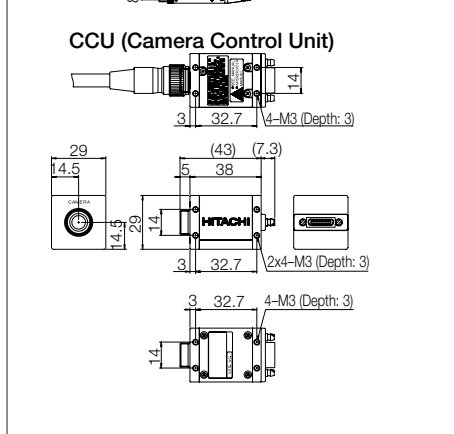
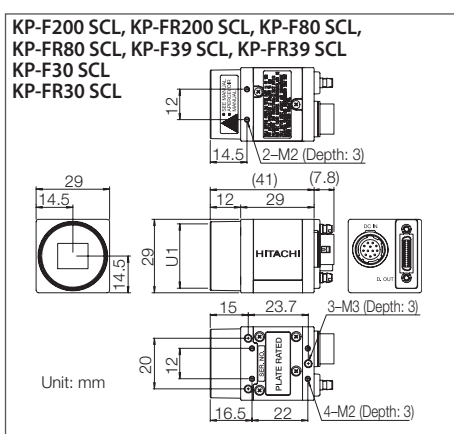
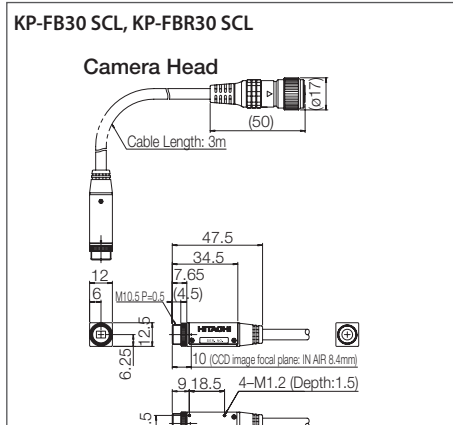
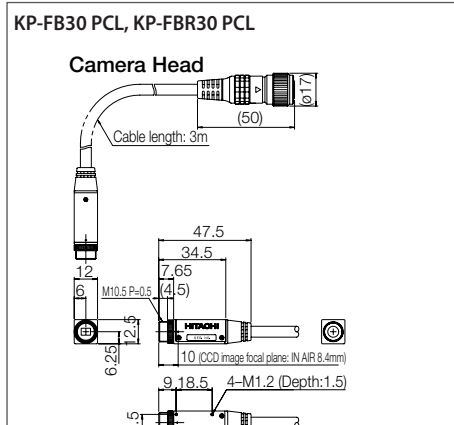
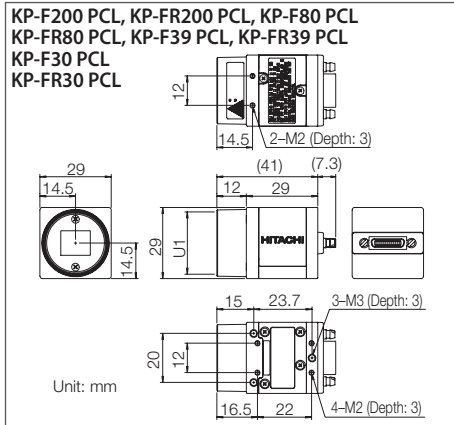
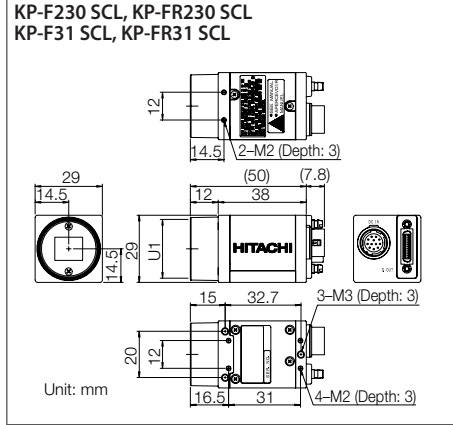
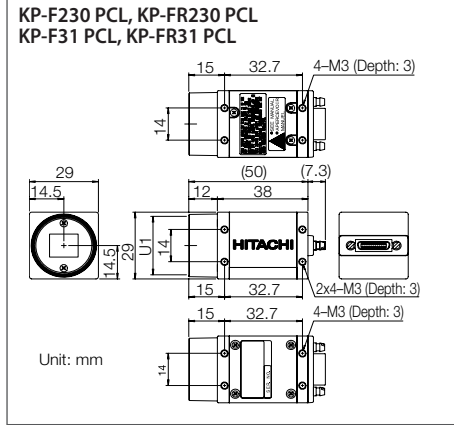
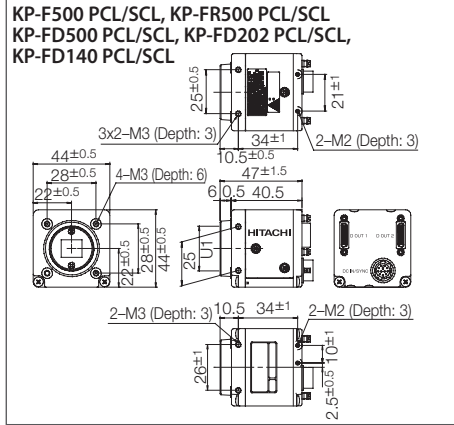


KP-F230 PCL KP-FR230 PCL
 KP-F200 PCL KP-FR200 PCL
 KP-F80 PCL KP-FR80 PCL
 KP-F31 PCL KP-FR31 PCL
 KP-F39 PCL KP-FR39 PCL
 KP-F30 PCL KP-FR30 PCL
 KP-FB30 PCL KP-FBR30 PCL
 (CCU) (CCU)



KP-F230 SCL KP-FR230 SCL
 KP-F200 SCL KP-FR200 SCL
 KP-F80 SCL KP-FR80 SCL
 KP-F31 SCL KP-FR31 SCL
 KP-F39 SCL KP-FR39 SCL
 KP-F30 SCL KP-FR30 SCL
 KP-FB30 SCL KP-FBR30 SCL
 (CCU) (CCU)

Dimensions



CAUTION: To ensure safe operation, please read the instruction manual before using this product.

These Specifications are subject to change without notice.

Hitachi Kokusai Electric Inc.

Head Office : 14-1, Sotokanda 4-chome, Chiyoda-ku, Tokyo 101-8980, Japan
 Phone : +81(0) 3-6734-9432 Fax : +81(0) 3-5209-5942
 URL : <http://www.h-kokusai.com>

Hitachi Kokusai Electric (Shanghai) Co., Ltd. Beijing Branch
 Room 1413, Beijing Fortune Building, 5 Dong San Huan Bei-Lu, Chao Yang District, Beijing
 Phone : +86(0) 10-6590-8755 Fax : +86(0) 10-6590-8757

Hitachi Kokusai Electric America, Ltd. URL : <http://hitachikokusai.us>
Headquarters and : 150 Crossways Park Drive, Woodbury, New York 11797, U. S. A.
Northeast Office : Phone : (+1) 516-921-7200 Fax : (+1) 516-496-3718 Service : (+1) 516-682-4409
Northeast Sales : Phone : (+1) 860-757-3892 Fax : (+1) 860-757-3894
West Office : 371 Van Ness Way, Suite 120 Torrance, CA, 90501, U. S. A.
 Phone : (+1) 310-328-6116 Fax : (+1) 310-328-6252

Midwest Sales : Phone : (+1) 330-334-4115 Fax : (+1) 516-496-3718 Service : (+1) 989-345-5379
South Sales : Phone : (+1) 727-521-0948 Fax : (+1) 727-527-9056 Service : (+1) 256-774-3777
Parts Center : Phone : (+1) 516-682-4435 Fax : (+1) 516-921-0993
Latin Sales : Phone : (+1) 516-682-4420 Fax : (+1) 516-496-3718

Hitachi Kokusai Electric Canada, Ltd. URL : www.hitachikokusai.ca
Head Office : 1 Select Avenue Unit#11 Scarborough, Ontario M1V 5J3, Canada
 Phone : (+1) 416-299-5900 Fax : (+1) 416-299-0450
Eastern Office : 5795 Chemin St. Francois St. Laurent, Quebec H4S 1B6, Canada
 Phone : (+1) 514-332-6687 Fax : (+1) 514-335-1664

Hitachi Kokusai Electric Europe GmbH

Head Office : Weiskircher Straße 88, Jügesheim D-63110 Rodgau, Germany
 Phone : +49(0) 6106-69920 Fax : +49(0) 6106-16906
 URL : www.hitachi-ke-eu.com
 General email address : info@hitachi-ke-eu.com

Hitachi Kokusai Electric U.K. Ltd.

Head Office : Windsor House, Britannia Road, Waltham Cross, Hertfordshire EN8 7NX,
 United Kingdom
 Phone : +44(0) 845-121-2177 Fax : +44(0) 845-121-2180
 General email address : uksales@hitachi-ke-eu.com



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