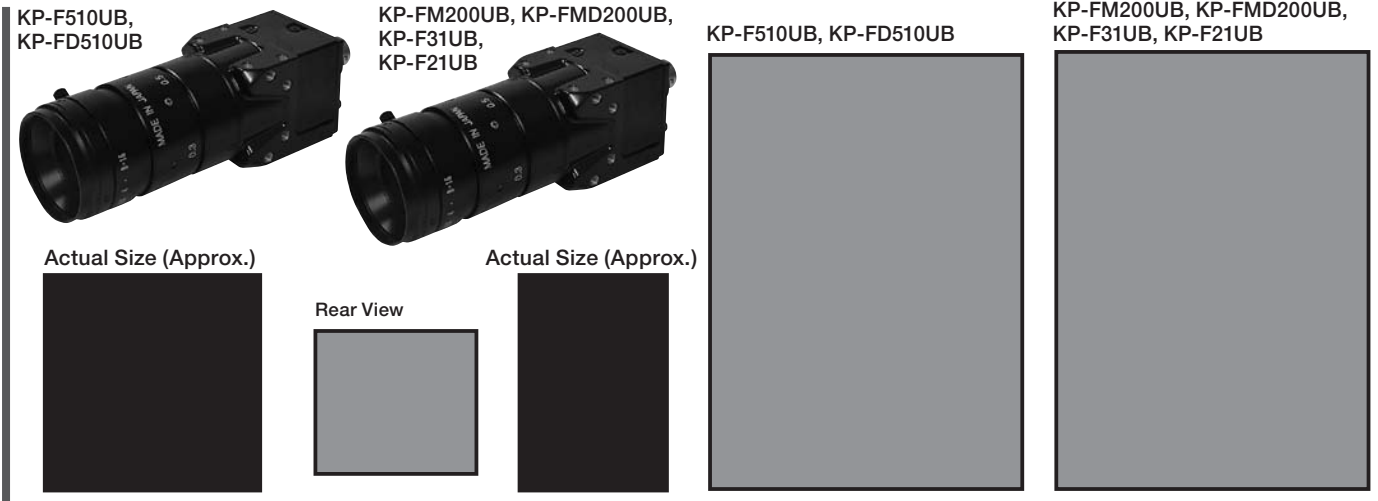


Digital Interface Cameras

KP-FD510UB	USB3 Vision	1CCD Color (RGB/RAW)	2/3" CCD	5.05 M Pixels (2456 x 2058)	Max. 18 frames per sec. (RAW)	29(W) x 29(W) x 29(D) mm
KP-F510UB		1CCD Black & White			Max. 12 frames per sec. (RGB)	
KP-FMD200UB		1CMOS Color (RGB/RAW)	1/1.8" CMOS	UXGA (1.92 M Pixels) (1600 x 1200)	Max. 53 frames per sec.	29(W) x 29(W) x 20(D) mm
KP-FM200UB		1CMOS Black & White				
KP-F31UB		1CCD Black & White	1/3" CCD	VGA (0.32 M Pixels) (656 x 494)	Max. 125 frames per sec.	
KP-F21UB		1CCD Black & White	1/2" CCD			



		KP-FD510UB KP-F510UB	KP-FMD200UB KP-FM200UB	KP-F31UB	KP-F21UB
Imaging device		2/3-inch progressive scan interline CCD (XXXXXX)	1/1.8-inch CMOS (XXXXXX)	1/3-inch progressive scan interline CCD (XXXXXX)	1/2-inch progressive scan interline CCD (XXXXXX)
	Total pixels	2456(H) x 2058(V)	1688(H) x 1248(V)	656(H) x 494(V)	
	Effective pixels				
	Pixel size	3.45 μm(H) x 3.45 μm(V) (Square pixel)	4.5 μm(H) x 4.5 μm(V) (Square pixel)		
	Color filter (FD/FMD model)	RGB primary color mosaic filter			-
Scanning area					
Scanning system		Progressive			
Sync system		Internal / external			
Lens mount		C mount (Flange focal distance: 17.526 mm)			
Video output	Interface	USB 3.0			
	Protocol	USB3 Vision compliant			
	Image format	FD/FMD model: RGB/RAW	F/FM model: B/W 8 bit	B/W 8 bit	
	Image size				
	Frame rate	18 frames per second (RAW) 12 frames per second (RGB)	53 frames per second (RAW)		
Sensitivity					
Electric shutter speed	PRESET				
	VARIABLE				
External trigger shutter	Mode				
	Input	Via USB3.0 cable (Software trigger), 12-pin connector (Hardware trigger)			
	Input level				
External sync signal	VD output				
	Strobe out				
Partial scan					
ALC (Auto level control) (FD/FMD model)					
White balance(FD/FMD model)					
Gain					
Gamma					
Color masking (FD/FMD model)					
Paint black, Sharpness, Black level, Knee (FD/FMD model)		Adjustable			
Power supply					
Power consumption	Normal				
	Partial scan				
Ambient temperature	Performance	0 °C to +40 °C / 90 %RH or less			
	Operating	-10 °C to +50 °C / 90 %RH or less			
	Storage	-20 °C to +60 °C / 70 %RH or less (without dew condensation)			
Vibration endurance		15 to 200 to 15Hz (98.6m/S ²), 10 minutes for each 3 axis			
Shock endurance		490.3 m/s ² (Once for each side of top, under, left and right)			
External dimensions		44(W) x 29(H) x 72(D) mm (not including lens and protrusions)			
Mass		Approx. 140 g (without lens)			