

IEEE1394.b Correspondence Progressive Scan Color Camera

KP-FD140F KP-FD32F



IEEE1394.b correspondence

- High-speed serial interface IEEE1394.b is supported and direct connection is possible to PC by the diameter cable of thin.
- A scan with PC is possible in a camera image at high-speed and high-resolution communication of a maximum of 800 Mbps.
- Two or more camera images by simple wiring can be simultaneously scanned by daisy chain connection.

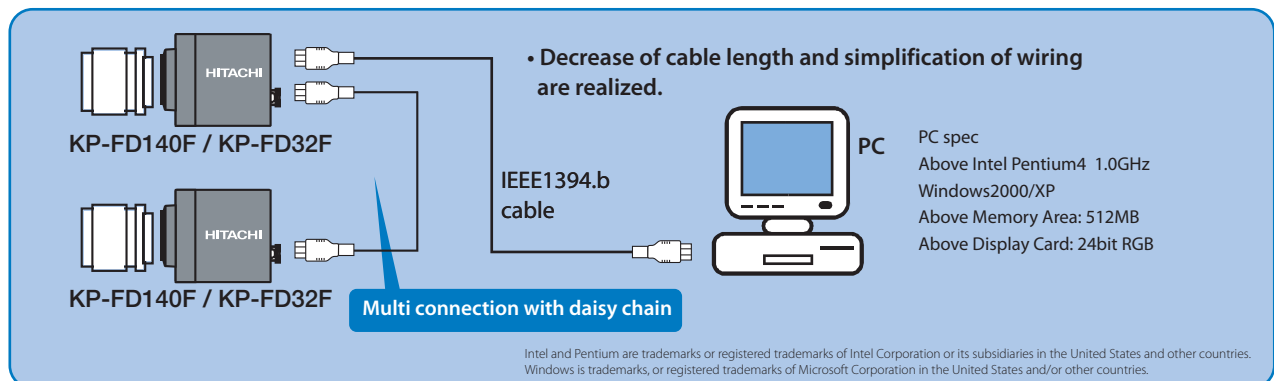
The lineup

- The 1,450,000 pixel model of high resolution — **KP-FD140F**
1,450,000 pixels (SXGA), 15 frames per second
➔ High resolution for substrate inspection
- High frame rate 60 frames per second — **KP-FD32F**
330,000 pixels (VGA), 60 frames per second
➔ High frame rate for Line inspection

Versatile features support many applications

- Electronic shutter
- Trigger
- White balance
- Daisy chain
- External sync
- Partial scan
- Independent 6 color masking
- Remote control

Connection example

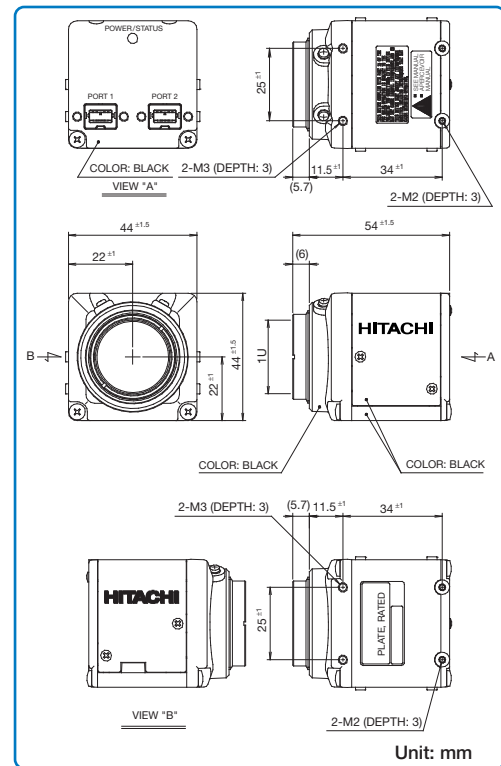


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Main Specifications

	KP-FD140F	KP-FD32F
Imaging device	1/2-inch interline type all pixel read-out system CCD	
Total pixels	1434(H) x 1050(V)	692(H) x 504(V)
Effective pixels	1392(H) x 1024(V)	656(H) x 492(V)
Pixel pitch	4.65 μm(H) x 4.65 μm(V) [square lattice]	9.9 μm(H) x 9.9 μm(V) [square lattice]
Scanning system	Progressive scan	
Synchronization	Internal/external (automatic switching)	
Picture signal output	IEEE1394.b (FireWire800)	
Interface	IEEE1394-based Digital Camera Specification Version 1.31 Conformity	
Transmission speed	800 / 400 / 200 Mbps	
Output data form	RGB24/YUV(4:2:2) / Raw8 / Raw16	
Output picture size	1392(H) x 1024(V) 1280(H) x 960(V) 1024(H) x 768(V) 800(H) x 600(V) 640(H) x 480(V)	656(H) x 492(V) 640(H) x 480(V)
Frame rate	15 frames/second (RGB24, 1392(H) x 1024(V))	60 frames/second (RGB24, 656(H) x 492(V))
The minimum photographic subject illumination	25 lx (F1.4, maximum gain)	20 lx (F1.4, maximum gain)
Gain	Automatic / manual (0 dB to 18dB)	
Electronic shutter speed	Automatic(AES) / manual operation(VARIABLE) 1/100000 second to 10 second	
External trigger		
Mode	Fixed shutter (Mode 0), one trigger (Mode 1)	
Input	1394 Cable course (Software trigger), Our company original system (Hardware trigger)	
Current consumption	Approx. 3.8 W (DC+12 V)	Approx. 3.6 W (DC+12 V)
Automatic picture level control (ALC)	Picture level adjustment is possible	
White balance control	ATW / MANUAL / One-push	
Gamma	OFF / LUT	
Color masking	OFF / ON (6 color independence masking)	
Color saturation	Adjustment is possible.	
Sharpness	Adjustment is possible.	
Brightness	Adjustment is possible.	
Daisy chain	Connection is possible.	
Lens mount	C mount (With a flange back adjustment mechanism)	
Power supply	DC +8 V to +30 V (It supplies from an IEEE1394 cable)	
Ambient		
Operating	0 to +40 °C (+32 to ; 104 °F), 30 to 80%RH * If operated continuously, be sure to use at less than +40 °C (104 °F) for long term stable performance.	
Storage	-10 to +50 °C (+14 to +122 °F), 20t o 90% RH	
Vibration endurance	less than 68.65 m/s ² (It is the XYZ direction 30 minutes each about 10 to 200Hz) *Please do not add a strong vibration over a long time	
Shock endurance	less than 490.3 m/s ² (XYZ direction)	
External dimensions	44(W) x 44(H) x 54(D) mm (A lens is removed.)	
Mass	Approx. 130 g (A lens is removed.)	
Standard Accessory	Camera body CD-ROM (operation manual, driver software)	

Dimensions



Rear View



Optional Accessory

- IEEE1394 Cable
- Tripod Adaptor

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

These Specifications are subject to change without notice.

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